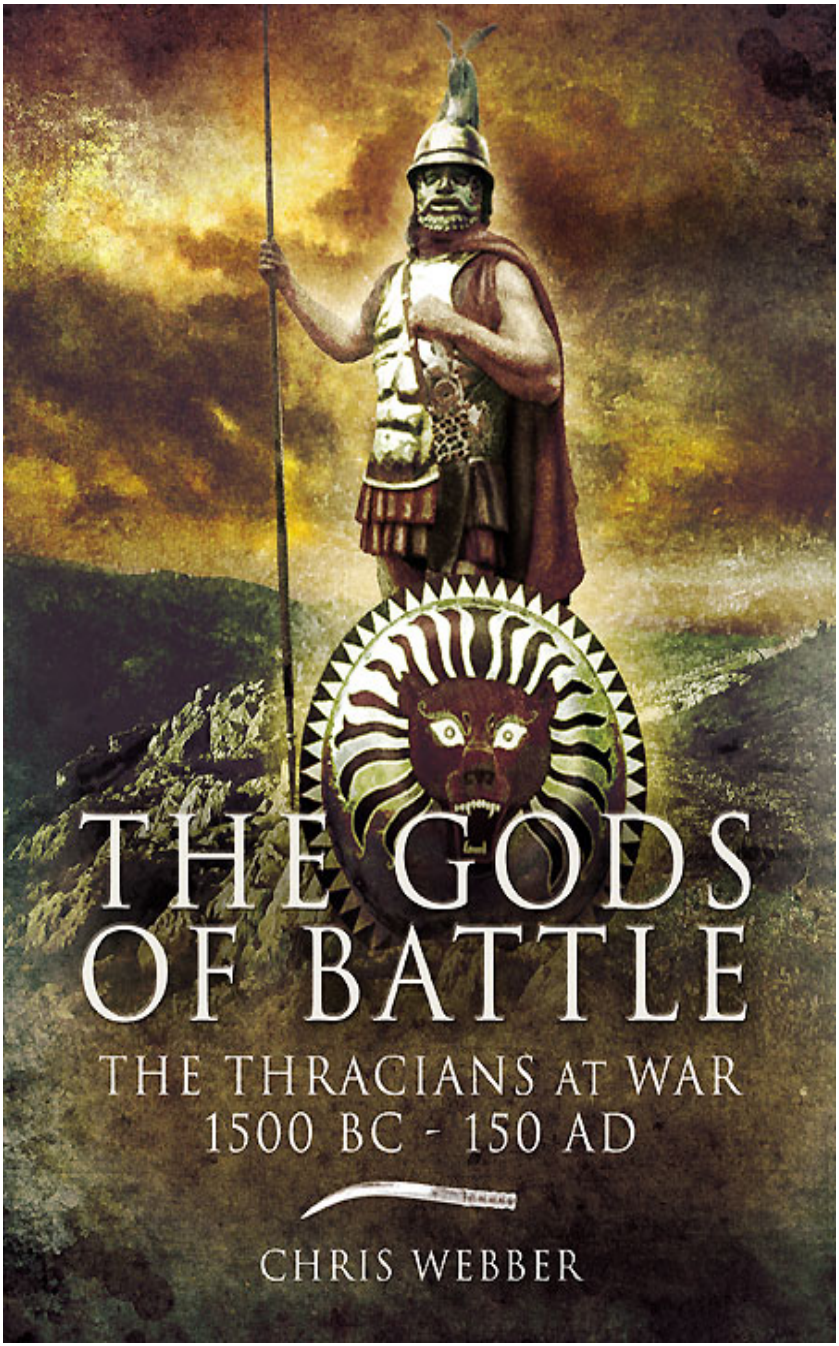

THE GODS OF BATTLE
THE THRACIANS AT WAR
1500 BC - 150 AD
CHRIS WEBBER

In Memoriam: Professor Alexander Fol

The Gods of Battle

The Thracians at War 1500 BC–AD 150

Christopher Webber



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Foreword

Christopher Webber's book is the only one of its kind among the abundant Thracological literature*. It is perfectly and clearly structured, laconic, but thoroughly presents the state of knowledge of the ancient Thracians from the pre-Roman epoch. The kernel of the presentation is the armaments. Such a starting viewpoint is especially productive when it concerns the ancient non-literary societies, because the warfare in its total scope reflects their social-political, economical and religious structures. In the case with the Thracians Mr. Webber's approach is expressively justifiable also from the character of the multiple sources about this people in Southeastern Europe. In the space between the South Carpathians and the Rhodopes at the northern coast of the Aegean Sea and between the two river valleys of Dniester–Dnieper and the two river valleys of Struma-Vardar (ancient Strymon Axios) together with the adjoining to this space northwestern lands of Asia Minor with the Bosphorus, the Dardanelles and the Sea of Marmara is situated 'the most numerous people of the world after the Hindus' (Herodotus, fifth century BC). The Thracians have been observed centuries on end by their neighbours the Hellenes and have been described by them with the languages of the word, the images and the sculpture. These observations have revived the silent archaeological material, and the stories of the historians have put the Thracians in the dynamics of the wars conducted by them or with their participation.

We are acquainted with Mr Webber's work from his web page which presented to the Thracologists from Europe and the USA the pleasant surprise to establish a contact with a colleague from Australia. With the preparation of the book the investigation entered in the favourable events of the last two years of the second Millennium. They passed for us, the Thracologists, under the sign of the preparation of the international congress in succession. The International Congresses of Thracology are held every fourth year (Sofia – 1972, Bucharest –1976,Vienna – 1980, Rotterdam – 1984, Moscow – 1988, Palma de Mallorca – 1992, Constanza – 1996) with the scientific management of the International Council of

Indo-European and Thracian Studies (forty-one scientists from fifteen countries) which head office is located in Sofia, Institute of Thracology – Bulgarian Academy of Sciences. The Eighth Congress was held exactly in Sofia in 2000 with the participation of 153 scientists from Europe and the USA. For many of them Mr Webber's web page was possibly the best occasion for beginning of a discussion.

On behalf of my colleagues I congratulate with joy on the performed work and express the hope that it will continue. The new archaeological discoveries in the countries from Southeastern Europe over which territory are situated the settlements of the big Thracian communities (Ukraine, Moldova, Romania, Bulgaria, Greece, Turkey, Macedonia, Yugoslavia) are a real present for Mr Webber's investigation.

I suppose that he will accept it.

Sofia, 03.01.2001
Alexander Fol Univ. Prof., DrSc, PhD
Secretary General of the International Council of Indo-European and Thracian
Studies /41 scholars from 15 countries

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* Professor Fol sent me this preface for my first book on Thracian warfare. I was unable to fit it into the other book, but as it remains relevant to this work, it is included here, with the kind permission of Valeria Fol.

Introduction

Despite being at a major cultural crossroads, the Thracians retained their own customs and language for thousands of years. In prehistoric times their homeland originally stretched from Hungary to the Ukraine and the Black Sea to the Aegean. Although they lived on the periphery of the known and civilized world, they exercised an important influence on the peoples with whom they had contact (principally the ancient Greeks). One of the most important ways they changed the civilized world was through their methods of warfare (they also affected Greek religion and dress). The deadly conflicts with the Greeks helped to propel the Greeks away from citizen soldiers and towards mercenaries, specialists, and professional soldiers. They encouraged the Greeks to develop new tactical doctrines that involved the use of new weapons and equipment, new troop types, and all-arms battle groups. The use of Thracian (and other) mercenaries undermined the security of the democratic states, as it was too easy for a tyrant to gain exclusive control of these men. They came from a foreign land and were not interested in the fate of a *polis* (city-state), only that of their paymaster. It is important to study Thracian warfare, as the story of its development is a significant chapter in the development of the wider (Greek and Roman) world. The Thracians were heavily influenced by the Greeks and Romans but retained their own style of warfare to the end. It is also important to study Thracian warfare because it was shaped by their society and formed a prominent part of daily life for the Thracians.

The Origin of the Thracians

The Thracians were an Indo-European people who occupied the area between Serbia, northern Greece, southern Russia, and northwestern Turkey. Despite their wide geographical distribution they shared the same language and culture, which lasted until the arrival of the Slavs in the sixth to seventh centuries AD.[1] This is known both from literary and archaeological sources. Herodotus says:

> They go by various names in different parts of the country, but they all live in much the same way with the exception of the Getai, the Thrausi, and the people north of Creston.[2]

In their archaeology you see the same style of tombs, metal work, and pottery right across the area. The Thracians who lived near the Danube and further north had the same cultural motifs, although they may have used different weapons and armour (and clothing to some extent) from other Thracians. The pottery from the classical era is quite distinctive but looks really ugly today. It is called 'monochromatic' because it is a uniform dull grey colour, without decoration. Originally it might have been a glossy black, but the lack of decoration is remarkable given their beautifully-ornamented metal work (toreutics) and the brilliance of pottery from earlier eras. Thracian toreutics and tomb painting show a brilliant synthesis of a unique Thracian style with Persian, Skythian, and Greek motifs. Only a few inscriptions in the Thracian language have been found, all written in the Greek alphabet, and mostly just names. They left us no written records, and their history has to be pieced together from archaeological discoveries and short texts written by their enemies.

The Indo-European languages are divided into the Eastern (Satem) and Western (Centum) groups, roughly divided down a line through central Europe. The Western European languages are all in the Centum group. The Thracian language is classified as part of the Satem group, which links them to Iranians, Slavs and Baltic people (some Baltic people are also said to have a high proportion of red hair). Similarities with the ancient Iranian peoples (e.g. Skythians, Cimmerians, and Sarmatians) are further confirmed by historical and archaeological evidence of early Thracian culture; way of life; crafts, works of art, and burial practices. Bulgarian scholars (Alexander Fol, Ivan Marazov and Elka Penkova, for example) have suggested that the Thracians were part of a wider 'Pelasgian' group of peoples, due to the observed parallels between the Thracian culture and the ancient Minoan, Mycenaean and Phrygian cultures.

From before the Trojan War until the Roman conquest they were a tribal Homeric society, with many similarities to that of Mycenae. Thracians were still burying their kings in beehive tombs in the third century. As Alexander Fol puts it:

> if we compare Thrace of all the classical period with Mycenaean Greece, we shall find many affinities. During Pericles' time Thracians were still hearing the clash of swords as the ancient heroes fought.

> Archaism was an inherent feature of Thracian religious feeling. This also meant that it had preserved the intensity of passion which characterised the Mycenaean age.[3]

This allows the cautious use of Homeric descriptions of Thracians along with more reliable texts from later authors.

The Balkans was the site of major Neolithic cultures, including theVinca,Varna, Karanovo, and Hamangia cultures. The Neolithic ancestors of the Thracians migrated to south-eastern Europe in the seventh millennium BC.[4] Between the sixth and the third millennia BC they were part of the Vinca culture, which could be found stretching around the course of the Danube in Serbia, Croatia, Romania, Bulgaria, Montenegro and the Republic of Macedonia, although traces of it can be found all around the Balkans, parts of Central Europe and Asia Minor. In the area of what is now north-eastern Bulgaria and the Danube Delta could be found the Hamangia culture, from the middle of the sixth millennium BC. At this time there were contacts between Thrace and Asia Minor, Greece, and elsewhere on the Balkan Peninsula. Contemporary weapons – spears, axes, hand axes, and primitive knives – were made of wood and stone bound together with glue and sinew or other non-ferrous materials.

By the end of the fifth millennium BC they were mining and smelting copper, and had a prosperous and stable society. The pottery of this time differed starkly from later periods, being vibrantly decorated and coloured. The copper was at first just hammered nuggets that were made into items such as earrings for idols, but it was then made into weapons and tools as the technology of smelting and casting advanced. As copper is a soft metal and was so expensive to produce (almost as expensive as gold), it never entirely replaced stone as a material for tools and weapons, so its use was often for prestige purposes. Copper weapons would have remained mainly in the hands of priest/chieftains, while the rest of the tribesmen were armed with hand axes and stone-tipped or fire-hardened wooden spears. The Copper Age (Chalcolithic) began in Thrace earlier than in the Aegean, and likely had an independent start.

The fifth to fourth millennia BC represent the transition between the Neolithic and Chalcolithic periods. There is evidence in the Danube delta and other locations of a flourishing Chalcolithic proto-civilization, Europe's earliest.[5] They were the first to work gold and therefore the first metalworkers. There was a spectacular flowering of the Chalcolithic culture around 3000BC, with the world's oldest goldwork being found in a necropolis near Varna. Copper axes were now being made. The copper axe

was a symbol of authority, and a ceremonial sceptre shaped like an axe has been found at Varna. At Varna, some of the graves were purely symbolic cenotaphs – no body was actually buried there. Such graves were dug for men who had achieved something noteworthy for their native region or tribe, possibly having fallen on some distant battlefield. In the graves lay clay masks where the dead hero's head would have been, on which the eyes, mouth and teeth were indicated by gold plaques. The 'head' was further decorated with a gold diadem and gold earrings, and at the place where the neck would have been were little gold amulets. In other respects the cenotaphs were adorned in the same fashion as the graves containing burials. In any case, it would seem that the role of gold in assuring the eternal life of the deceased priest-king was established at this time, and this tradition continued in Thracian graves for thousands of years, well into the Roman era.

It is thought that a Proto-Thracian people developed from a mixture of indigenous peoples and Indo-Europeans from the time of Proto-Indo-European expansion in the early Bronze Age. Thracian tombs can be found dating back to 3000BC, when proto-Thracian culture began to form. The third to early second millennium BC (the early and middle Bronze Ages) marked a very turbulent time in Thrace. There was evidently a major disruption to society, and the pottery became plain and utilitarian. Around this time (between 3000 and 1200BC) a man using a bow and arrow was painted in a primitive hunting scene on the wall of the 3km-long Magura Cave in Vidin, north-western Bulgaria (18km from Belogradchik). He is next to what appear to be poorly-painted two-legged, long-necked animals that might be ostriches, deer, or men dressed as animals (in the kuker tradition).

About 1600BC the Achaean Greeks invaded the Balkans, creating kingdoms of Mycenae, Argos, and Tiryns. Then around 1500BC (definitely before 1300BC), the indigenous peoples of Thrace were conquered by an Indo-European, horse-riding people. These were Homer's hard-riding, magnificently equipped warrior Thracians, who had migrated to south-eastern Europe after the Greeks. Their taste for war, silver, gold, and fine horses stayed with them throughout ancient history. They spoke an Indo-European language, akin to Latin and Greek, that is nowadays closer to the Baltic and Persian languages.[6]

Thrace, the Balkans and the entire eastern Mediterranean were again overrun by waves of tribes between the end of the second and the beginning of the first millennium BC. The strife and terror of the time has left us just a few splendid artefacts. During the second half of the second

millennium BC the Vulchitrun treasure (consisting of thirteen golden ritual drinking vessels weighing a total of 12.425kg) and several other hoards of treasure were hidden on the broad plains on either side of the lower Danube, between the Carpathians and the Balkan mountains. This was the time of the earliest rock tombs in Thrace; the legendary Thracian priest-kings Orpheus, Rhesos, Lycurgus, Tereus, and Zalmoxis; and 'Mycenaean Thrace'. There is evidence for a strong and wealthy north Thracian power, contemporary with Mycenae, reaching west across the Hungarian plain and east beyond the Dnieper.

In Thrace the gradual transition to the Iron Age began in the thirteenth century BC. There were mines in Bulgaria where good iron ore with few impurities could be found, but the transition to iron weapons occurred at the same slow pace as elsewhere, continuing to the end of the sixth century BC. Nevertheless there were profound changes.

In the twelfth century, northern invaders, the Dorians, settled in Greece, destroying Mycenae in 1100BC, and plunged the Balkan Peninsula into the Greek Dark Ages (1200–800BC). Writing vanished, monumental architecture disappeared, and population declined to less than a fifth of its previous Mycenaean high. Some of these immigrant peoples, passing from Europe through Thrace into Asia in great waves, settled in Asia Minor, especially in Bithynia and the Troad, with the Brygi becoming ancestors of the Phrygians.[7] Although the Phrygians lost much of their Thracian roots, the Bithynians retained their Thracian culture.[8] Bevan says they were

> Thracian immigrants from the opposite shore, and shared the same characteristics as their European cousins, savage hardihood, wild abandonment to the frenzy of religion and war. The terror of them kept the Greeks from making any settlement along their coast, from Calchedon to Heraclea, and woe betide the mariner driven to land there![9]

From the archaeological evidence, it is known that only a small proportion of the Thracian population took part in these migrations and they did not cause much change in the ethnic structure of Thrace. It is nevertheless all the more understandable why these people allied with Troy in the Trojan War.

From a Thracian perspective the Trojan War was a combined struggle to confound Mycenaean attempts to gain control of the Propontis and free access to the Black Sea. The defeat of Troy (*c.* 1190) did not stop Thrace

from becoming a significant maritime power in the Aegean for the final century of the millennium. From 1100–1000BC Troy VIIb was a Thracian settlement.[10]

The migrations caused other Thracians to flee the plains and take refuge in the Rhodope mountains (the regions of Sakar and Strandja), and in the eastern sections of the Balkan Range. It was there, between the twelfth and sixth centuries BC, that imposing megalithic tombs then appeared, suggesting that south-eastern Thrace was the centre of an advanced civilization. These dolmens were tombs made of large unworked slabs of stone. There were also burial chambers hewn directly into steep rock faces. The dolmens and rock-face tombs were always constructed in mountainous areas and were probably related to the Thracian practice of sun worship.[11]

Thracian tribes inhabited Central Macedonia until the founding of the kingdom of Macedonia by the Temenids (early seventh century BC), at which time they were forced to move eastwards.[12] In the end, the Thracian tribes were restricted mainly to the north-eastern area of the Balkans.

From the seventh century many Greek colonies were founded on Thracian shores, leading to intense conflict and mutual influence between the Greeks and Thracians throughout the historical period. Thousands of Greek lives were lost. Between the Persian and Peloponnesian Wars, the Athenians lost nine expeditions while trying to colonize the Strymon valley area alone.[13] This included an expedition inland from Amphipolis, which was cut to pieces by a combined army of Thracians.[14] Nevertheless, by 600BC a line of Greek cities from the north-eastern Mediterranean to the Black Sea had been firmly established, and an active trade developed between them and the 'barbarians' in the hinterland.[15] The historian Thucydides lived in that area and was the Athenian general responsible for Thrace (until he failed to capture Amphipolis).[16] Other famous Athenians with Thracian connections include Themistocles, who may have had a Thracian mother, and Miltiades, who married Hegesipyle, daughter of the Thracian king Olorus.[17]

The Thracians were ruled by independent chieftains until the fifth century, when the first Thracian kingdoms were formed. The greatest of these, the kingdom of the Odrysians, was created about 460BC. At its height, ruled by Sitalkes, it covered the area from the Strymon River to the Black Sea and from the Aegean to the Danube. This Thracian empire produced nearly as much tribute as the Athenian empire. The Odrysian kings were subjugated in 342BC by the Macedonians. The dynasty continued, though; Seuthes III fought to keep out Lysimachus and went on to build his own capital, Seuthopolis; Dromichaetes, king of the Getai, also

fought the Macedonians and even captured Lysimachus.

The Gods of Battle

Herodotus says that Thracians honoured warriors very highly, and despised all other occupations.[18] Thracian warriors were ferocious opponents who were in high demand as mercenaries. They are often described as 'warlike' or the 'the most warlike nation.' For instance, Justin says:

> After the death of Alexander, when the provinces were divided among his successors, the most warlike nations [primarily the Thracians] were assigned to Lysimachus as the bravest of them all; so far, by general consent, had he the preeminence over the rest in military merit.[19]

War was endemic in the region, and the Thracians claimed descent from Thrax, son of the war god, Ares. Euripides said that the Thracians had 'hearts of Ares'[20] and the soldier poet Archilochos, referring to the Thracian tribe of the Abantes, said they were 'the gods of battle.'[21] He lived on Thasos about 650BC and fought the Thracian tribe of the Saians there. He was not ashamed to admit having once fled from the field, leaving his shield behind as booty to a Thracian warrior. The god of battle was also said to rule the Thracian coast.[22] Ares himself was said to be Thracian, and was one of the gods the Thracians worshiped. Euripides says of Rhesos (who has come to aid Troy):

> A god, O Troy, a god, a very Ares, Strymon's colt and the tuneful Muse's, has come to breathe courage into you.[23]

The Thracian Hero, an equestrian who appears again and again in Thracian iconography, was also popular and highly venerated. The nature of the cult is not fully understood, but its mythology equated to something like St George and the Dragon and was a warrior cult. Valerius Flaccus says:

> Ought we to have made no prayers, sought no agreement with the king, but plunged all into battle's doubtful issue? So act the Thracians.[24]

Mercenary Thracians were often used for executions or massacres, because of their savagery.[25]

The other main gods the Thracians worshipped were Dionysios and

Artemis (or the mother goddess Bendis). They were an extravagant, drunken, high-spirited people who loved singing war songs and dancing. Orpheus, a great musician, was Thracian. His singing and playing were said to be so beautiful that animals and even trees and rocks moved about him in dance. The Orphic religion was popular, and the Thracians believed in life after death, one of the reasons their warriors were so fearless. The Thracian bard Thamyris was so good at singing that he thought he could out-sing the Muses but was blinded for his presumption. The Thracian battle hymn seems to have been quite impressive, as Strabo says the Greeks had a special name for it, calling it the *titanismos*, in imitation of the cry to the Titans.[26] Tacitus says it was a Thracian national custom to 'gambol' with songs and dances in front of their ramparts.[27] Xenophon describes similar scenes at a dinner with Seuthes:

> After this there came in musicians blowing upon horns such as they use in giving signals, and playing upon trumpets of raw ox-hide not only measured notes, but music like that of a harp. And Seuthes himself got up, raised a war-cry, and sprang aside very nimbly, as though avoiding a missile.[28]

They celebrated in a similar way after winning a battle. Livy says:

> After the victors returned to the camp, all indeed rejoiced, but above the others the swaggering joy of the Thracians was conspicuous; for they returned bearing with songs the heads of their enemies impaled on spears.[29]

Pausanias says that drunken Thracian women killed Orpheus, 'and hereafter the custom of their men has been to march to battle drunk.'[30] This custom is confirmed by Polyaenus, who says:

> After plundering Thrace, Clearchus… encamped near the mountains of Thrace. When the Thracians gathered, he knew that, drunk and rushing from the mountains, they would attack at night.[31]

Plutarch says:

> the women of this country [Macedonia] having always been extremely addicted to the enthusiastic Orphic rites, and the wild worship of Bacchus … imitated in many things the practices of the Edonian and Thracian women about Mount Haemus, from whom the word

> *threskeuein* seems to have been derived, as a special form of superfluous and over-curious forms of adoration; and that Olympias, zealously affecting these fanatical and enthusiastic inspirations, to perform them with more barbaric dread, was wont in the dances proper to have great serpents around her.[32]

They were infamous for their love of plunder. Alexander encouraged his Thracian mercenaries before the Battle of Issus by saying that all the purple and gold the Persians were wearing was simply plunder ready to be taken.[33] Perhaps the prospect of getting to the spoils explains why Thucydides says:

> For the Thracian race, like all the most bloodthirsty barbarians, are always particularly bloodthirsty when everything is going their own way.[34]

There are also several recorded instances where mercenary Thracians switch sides if offered a bribe, or because they preferred to fight for the other side.[35]

Ancient writers were hard put to it to decide which of the Thracian tribes was the most valiant – the plains tribes: Getai, Moesi, and Odrysai; or mountain tribes: Thyni, Odomanti, Dii, Bessi, Bisaltai, and Satrai. Other Thracian tribes included the Triballi and, probably, the Paeonians, though the latter are usually referred to separately from the Thracians. Herodotus described the Thracians as the most numerous people of all, after the Indians.[36] He said that they would be the most powerful of all nations if they didn't enjoy fighting each other so much. There may have been a million Thracians, divided among as many as forty tribes.[37] They lived almost entirely in villages, but used fortified refuges when necessary.[38] They were employed as mercenaries by all the great Mediterranean civilizations. Thrace had the potential to field huge numbers of troops, and the Greeks and Romans lived in fear of a dark Thracian cloud descending from the north, devastating civilization in the Balkans.

> The Macedonian kings now seem to threaten the liberty of Greece; but if that kingdom and people were removed, the Thracians, Illyrians, and after them the Gauls, savage and untamed peoples, would pour into Macedonia, and into Greece. By demolishing all the nearer powers, he said, we should offer access to ourselves by larger and more menacing races.[39]

The reputation of the Thracians caused their more civilized neighbours to emulate them. Young Athenian cavalrymen wore the fox skin hat, the short, bright, decorated cloak, and the turnover boots of Thracian horsemen. At first sight some of these Athenians might be taken for Thracians.

> But the vases of the *dokimasia* and even the sculptures of the Parthenon show that it was Athenian citizens who were affecting the costume of the north. Presumably they did so because the clothes suggested the skill, courage and fierceness of these foreigners.[40]

After surviving invasions by the Persians, Greeks, Macedonians, and Celts, the northern/Danubian Thracians of Moesia become part of a Roman province in AD 6, and the others were finally conquered by Rome in AD 46 when the southern part of Thrace became the province of Thracia. Their cousins the Dacians continued to fight the Romans vigorously but lost their independence when Dacia became a province in AD 106. The most famous Thracians were Orpheus and Spartacus.

The Sources

The sources for Thracian military history are mixed. The Thracians themselves produced no written records, and only three inscriptions in the Thracian language are known. For a connected narrative that puts events in a sequence, we depend on the Greek and Roman historians. Even this is fragmentary and must be carefully pieced together. The study of the Thracians is like a huge detective story, with tiny clues being found in the most unlikely places. Finding these texts can be very difficult and time consuming. To make this easier for readers, the entire collection of relevant ancient texts has been placed on this book's companion web site. Also, in this book the texts are often quoted in full rather than just giving the reference, as would normally be the case.

The ancient texts are full of cultural bias, and we have to remember this whenever we use them. The Greeks and Roman writers thought of the Thracians as barbarians. The word 'barbarian' literally meant anybody who didn't speak Greek. It also meant they did not think of the Thracians as noble savages, but filthy 'butter-eating' savages. They thought they were brave, but excessive, with what we would now call a marvellous zest for life. They said the Thracians wore colourful clothes, drank too much, were terrific musicians and singers, great warriors, and loved to dance. Their gods were those of the strong north wind (Boreas), wine and excess (Dionysios), war (Ares and the Thracian Hero), the sun, a mother goddess (Bendis) and the afterlife (Zalmoxis/Orpheus). They had orgiastic religious rites. They were illiterate and did not live in towns and cities. In short, they represented the power of chaos in contrast to what the historians saw as their superior ordered civilized life, which they constantly threatened to overthrow.

The description though is consistent through hundreds of years and many different authors of different nationalities. It is likely therefore that the sources can be relied upon as long as we are aware of the bias inherent in all accounts. Other types of bias are also evident, for instance in the numbers of troops present at battles, and in the way combatants are

described favourably, unfavourably, or (all too often) not at all. Some authors added an overly pro-Greek or pro-Roman bias that makes it even more difficult to discover the truth.

The only source available prior to the sixth century is Homer's *Iliad*. His work (and that of the even more remote Virgil), which only mention the Thracians briefly, is mainly literary; however it may be based on fact and contains many accurate descriptions. It is certainly a fabulous confabulation of Bronze Age and classical warfare styles. The paucity of source material (a common problem with Thracian studies) means we have to use it even though we know it to be, to some extent, unreliable.

Ancient writers were often more concerned with literary style than literal truth. What often passes as history turns out to be dramatic representations of what the historian thought may have occurred. Also, ancient historians were concerned with rhetoric, and expected their work to be recited rather than read. This is why there are so many great (but fictitious) speeches. Names, dates, and details of battles were frequently inaccurate, invented, or sometimes omitted in the interests of telling a good story. Not the least of the problems this creates is that of troop numbers. The size of military forces is often concealed or changed to make a victory more astounding, or a defeat less galling. Translations can also cause problems, for example the Greek words for many, a thousand etc. are so similar – but it's not very useful to us to say there were 'myriads of them'. With this in mind, I try to qualify the figures where possible. This is difficult, as in many instances there is no corroborating evidence. In those cases, I have given the troop figures as mentioned in the ancient texts without comment, as I expect the reader will have his or her own opinion as to the accuracy (or ridiculousness) of the figures.

The first of the historians is Herodotus (484–425BC), who described the Thracians as part of the background to his main story, the fifth-century Greek and Persian wars. Herodotus must be read with caution, because he wrote down hearsay evidence without checking it. He also had no military experience and wrote years after the events described. He is nevertheless regarded as the 'Father of History'. Some of his stories about the Thracians have been confirmed by archaeology. For instance, he says that if a man died, his wife was killed on the grave and buried with him, and there have been several such tragic discoveries made in Bulgaria of women buried in mounds with a man, often with magnificent golden jewellery, but with a knife in her chest.

The second main source is Thucydides (460–395BC), who lived in Thrace and commanded Athenian troops in the area. Thucydides was much

more rigorous with his collection of material, going to great lengths to verify it. Xenophon (431–352BC) is the third important source. He fought alongside Thracian mercenaries, against Bithynian Thracians, and for a Thracian king. His *Anabasis* contains many eyewitness accounts both of combined operations between Greek mercenaries and Thracian troops, and battles with Thracians. The *Hellenica* also includes many passages describing peltast actions. Other Greek writers include Diodorus the Sicilian, a first century BC compiler whose universal history drew on various sources, some more reputable than others. Diodorus is sometimes the only source for the history of Thrace during Hellenistic times. Arrian (c.AD 87–145) wrote hundreds of years after the events, but he served as a cavalry officer in the Roman army, seeing action in Dacia. He later commanded two legions and may have participated in Trajan's campaign against the Parthians.[41] His history of Alexander is regarded as the most reliable because it is based on eyewitness accounts. He gives us some important passages about Thrace during the rise of Alexander, and Thracian troops in Alexander's service. He also wrote a military manual, the *Ars Tactica*, which describes the Macedonian army and, in doing so, gives the origin of the Thracian cavalry wedge formation.[42]

The Thracians are also mentioned by Plutarch, Curtius, Tacitus, Livy, Appian, Dio Cassius, Sallust, and Polybius. Plutarch (AD 46–120) was not concerned with writing history but with teaching morality, by exploring the influence of character – good or bad – on the lives of famous men. He had no military training but travelled widely, and was familiar with many of the locations about which he wrote. He gives us many incidents that are not provided by other authors, including the activities of the Thracians at the Battle of Pydna. Tacitus (AD 56–117) gives us an account of a Roman attack on a Thracian hill fort, and the actions of Thracians in Roman service. He was a legion commander but apparently did not see action and wrote some time after the events. Unfortunately a volume of his work that related much more about the history of Thrace has been lost. Livy (59BC–AD 17) tells us what the Thracians did at the Battle of Magnesia and its aftermath, including a Thracian ambush of a Roman baggage train and a rather fanciful Roman victory over a Thracian army. Livy is usually regarded as a reliable source, although he had no military experience and in many cases he simply retells Polybius' account of the Second Punic War in a different, perhaps more dramatic fashion.[43]

Dio Cassius (AD 150–235) wrote many years after the events and had no military experience. His work is faulty because it relies on unchecked sources and is mostly just a rewriting of Livy's history. He provides just a

few brief passages about the Thracians in the Roman era.

Polybius (c.200–118BC) fought in the Achaean War and commanded Greek troops before being taken as a hostage to Rome. He visited many of the battlefields about which he wrote, and interviewed the major commanders. His account is generally regarded as being very reliable as he checked his sources and used eyewitness accounts. He provides many descriptions of Thracians in Macedonian service, Thracians who attacked Macedonia, and other important passages about ancient military techniques.

Sallust (*c*.86–35BC) was an experienced soldier who saw combat in the civil war in Illyricum, Campania, and North Africa. His *Jugurthine War* provides a few accounts of Thracians in Roman service, but is generally untrustworthy as to numbers, dates, distances and size of forces.[44] Appian (c.95–*c*.165) wrote many years after the events he described, and had no military experience. His *Roman History* briefly includes the actions of Thracians during the Roman civil wars. Quintus Curtius Rufus was a Roman historian who is thought to have written his works during the reign of Emperor Claudius (AD 41–54). His biography of Alexander the Great is not highly regarded, as it reveals an ignorance of geography, chronology and technical military knowledge, focusing instead on character. Nevertheless, it includes text that is not in Arrian's history, including some important events involving the Thracians.

Knowledge of the military organization of Greek and Hellenistic armies has come down to us through a series of manuals on tactics, of which three have survived, by Asklepiodotos, Aelian, and Arrian. It is thought that all three works are derived from one source, a lost manual by Posidonius.[45] The fourth-century-BC mercenary captain Aeneas Tacticus wrote several books on Greek military matters, but the only surviving one is *How to Survive Under Siege*.[46] None of these except Arrian wrote anything directly about the Thracians that has survived, but their works provide useful background knowledge.

As Thracian texts are so rare, we also have to rely on literary works. Apollonius Rhodius' *Argonautica* was a Greek epic poem written in the third century BC. It tells the myth of Jason and the Argonauts. Jason sailed past Thrace and his crew of heroes included one Thracian – Orpheus. An early part of the story tells how the men of Lemnos defeated the nearby mainland Thracians in combat, brought back Thracian concubines, and lost interest in their own wives. Gaius Valerius Flaccus wrote his (Latin) *Argonautica*, based on Apollonius' work and Virgil's *Aeneid*, during the time of Vespasian, and died around AD 90. His version includes some

insights into the good and bad sides of the Thracian character, as well as information about the *rhomphaia*.

Ovid (43BC–AD 17) was a Roman poet who was exiled to live on the Black Sea coast of Thrace at Tomis (the modern Romanian city of Constanza), in Getic territory. He thought he was beyond the ends of the Earth and moaned a lot about his predicament (e.g. in *Letters from the Black Sea*), but since he moaned in writing his complaints give us a lot of useful information about the Getai. His *Metamorphoses* also include the myth of Orpheus and Eurydice. He wrote poems in the Getic language while at Tomis, and died there after living in Thrace for ten years.

Later compilers of history and writers of ancient literature (e.g. Polyaenus, Justin, and Aulus Gellius) also mention the Thracians, although these are often not very reliable. Polyaenus, for instance, was more interested in impressing his emperor than ensuring that each stratagem he wrote down was correctly attributed. To him, historical accuracy wasn't necessary to teach a tactical or strategic lesson. For instance, the story of Kersebleptes' corn seems to have come from a rhetorical exercise.[47] He was born around AD 110, so was writing up to 500 years after the event, giving further reason to treat his words with caution. All the same, many of his 871 stratagems are the only remaining record of some incidents involving the Thracians, so his work is quite significant.Archaeology has thus an important role in portraying the Thracians. There is a limited amount of epigraphic evidence –Greek inscriptions referring to Thrace have been found in Thrace and Athens. Thracian arms and armour have been found at many sites.

For the dress and armament of Thracian soldiers, there are a variety of artistic sources. It is here that we do have some splendid information of Thracian origin. The walls and ceilings of a few Thracian tombs depict Hellenistic Thracians at court, and there are a few tombstones of Thracian mercenaries which show them in reliefs. Thracians were also depicted in their own magnificent artworks, many of which are still being discovered today – gold and silver jewellery, sacred objects, and drinking vessels. They are depicted in Greek vase-paintings, and these must have been reasonably accurate, as some have been found in Thrace. There are also some Greek sculptures that show Greeks in Thracian dress (e.g. on the Parthenon frieze).

The picture provided by archaeology is incomplete. The chronology of Thracian kings is mostly obtained from coins, and there are several different versions of the Thracian royal histories. It is often hard to

determine the relationships between Thracian kings (and the line of succession) as all that may be known about them is a name on a coin, how many have been found, and their location(s).

Greek vases only show Thracians of the sixth to fourth centuries, and even then do not show the Thracian nobility. The depictions of Thracians by their own artists, the Greeks, and by the Persians are all quite different; the Persian basreliefs being particularly hard to reconcile. After the third century, most archaeological evidence is found in unpainted Thracian tombs or in Dacia. The non-Dacian evidence depicting Thracians consists of the Pydna monument at Delphi, the Abdera tombstone, and some Bithynian tombstones in Turkey and Palestine. There are also numerous carvings of the Thracian hero. The picture provided by archaeology is limited by the resources available in countries that are not rich; so that tomb robbing is rife (there are thousands of unexcavated burial mounds in Bulgaria). Many artefacts have been cited that are of unknown origin. Also they do not get written up in archaeological journals even after sitting in museum display cases for ten years.[48] Excavations of Thracian tombs are frequently not carried out due to lack of funds, or are reliant on foreign sponsorship. Many tombs that are excavated have to be closed immediately as there are no funds available for conservation or protection.

Many scholars get very upset when they see a mixture of Greek and Latin spellings in an ancient history book. In this case, the variety of source material and length of time covered makes it difficult to maintain a single Greek or Latin spelling scheme. Names in particular can get mangled after being translated from Thracian to Greek to Latin to Bulgarian (or Romanian) to English, or worse. There are so many ways to spell Thracian names such as 'Seuthes'/'Sevt', 'Amodokos'/ 'Medokos' and 'Hebryzelmis'/'Ebryzelmis' etc. that you are sometimes not sure if the same or a different person is being referred to. I have tried to use the Greek spellings or the most well known spelling but may not have changed the spelling if the orginal source was in Latin or is not known.

It is also necessary to say something about bias in the secondary sources. Much of what has been written about the Thracians was written during the Cold War, and was affected both by East/West tensions and Balkan nationalism. This often prevented knowledge about the Thracians from Bulgaria and Romania from reaching the west. In Greece, the emphasis on classical studies allied with the traditional animosity between Greece and its northern and eastern neighbours may have encouraged a reluctance to investigate their mutual non-Greek past. In Bulgaria, there was some attempt to hide the non-Slavic past – some discoveries were

actually hidden in vaults after being dug up.[49] There were also competing views about the Thracians that might be said to be specifically Bulgarian and Romanian (though the Romanians seem to be the only people to say this). Bulgarian scholars tend to say that the Dacians were descended from the Thracians whereas the Romanians say they were not.

Ideology was also important in the former communist countries such as East Germany, Bulgaria and Romania. History had to be written in accordance with Communist precepts. These provided some useful insights but this is something which one must be on guard against. For instance, the Satrap of Skudra is described as a feudal state, which might fit Communist theory but is incorrect. Similarly, the introduction of iron working between the tenth and seventh centuries is described as increasing social differentiation and being the prerequisite for the development of private property.[50] It unfortunately means that books that ask questions like 'Who were the Thracians?' 'How did they live?' 'What did they look like?' tend to be rather rare, – instead there is a large amount of work done on Thracian religion and mythology. This sort of thinking has been hard for some to let go of – a recently published (otherwise beautiful and very impressive) book has this as a caption for a picture: 'The participation of dogs in the hunting stresses their relation with the warrior ideology.'[51] The large amount of gold and silver artefacts found in Thracian tombs has also affected Thracian research, which has concentrated on the interpretation of these objects to the exclusion of other subjects.

In the years since the fall of the Berlin Wall, some great strides have been made in the study of Thracology, and remarkable discoveries are now almost routinely made every year. Exhibitions of Thracian artefacts are constantly on tour around the world, and there have been some wonderful new books written by the old generation of archaeologists. It is to be hoped that the participation of the Thracian nations in the European Community will help to remove some of the barriers to the study of Thracology – a hopeful sign is that the last Thracology conference was held in Athens, and the next in Istanbul. There are now Institutes of Thracology in Bulgaria, Romania, Turkey, Germany, and several other countries.

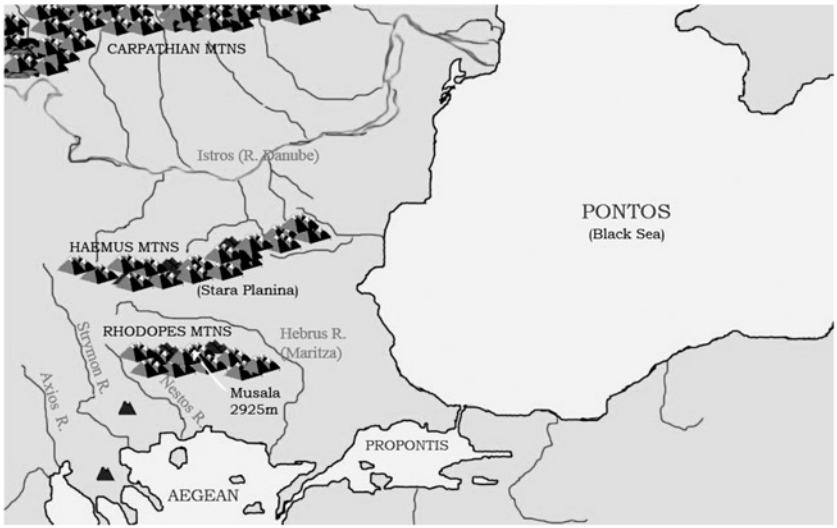
The lack of source material means that until further evidence becomes available, the reader should be aware that much that is written here can be disputed, and is often based on flimsy evidence, supposition and/or extrapolation. Where this is the case it is clearly indicated, and it is to be hoped that this will prompt further research in this area.

For a more thorough discussion of the problems of using ancient texts

to write about ancient warfare, I recommend reading John Drogo Montague, *Greek and Roman Warfare*, Greenhill Books, London, pp. 21–4 and pp. 3–15 of Philip Sabin, *Lost Battles*, Hambledon Continuum, London 2007.

Note on Terminology

The same weapons have many different names, which can be confusing. In this book 'lance' means a long spear used for shock action by cavalry. 'Mail' means armour made of small metal circles knitted and riveted together (only called 'chain mail' by Victorian historians). 'Targeteers' are called 'peltasts'. 'Long spear' means a spear 3m long or longer, used one-handed for hand-to-hand combat. 'Pike' means a spear at least 5m long, held in two hands. *'Sarissa'* means the same as 'pike'. 'Cavalry *sarissa'* means the same as *'xyston'* – a balanced, tapering lance. *'Kamax'* means an earlier form of cavalry lance that does not have tapering ends. 'Javelin' means any spear primarily thrown from a distance to hit its target.



Map 1. The major mountains ranges and rivers of Thrace.



Map 2. The towns and tribes of Thrace.

Chapter 1

Historical Outline: A Brief History of the Struggle for Thrace

Classical Era

The Sixth Century BC

The written history of the Thracians begins with Herodotus, as a sideshow to the Greek and Persian wars that occasionally moved to centre stage. In the first decade of the sixth century, the Persians invaded Thrace and made it part of Skudra, a border area that never quite pacified enough to make the status of satrapy. This lasted from about 512 to 476BC.[1] The area was ruled from Sestos.[2] Thracians were forced to join the invasions of Skythia and Greece.[3] Skudrians were well known in the Achaemenid Empire, and hundreds of them were in the service of the Great King in Parsa. They appear to have been the largest ethnic group mentioned in the Persepolis Fortification tablets (509–494BC). They are not mentioned in the later Persepolis Treasury Tablets (492–458BC), which perhaps reflects the smaller number of those tablets, or the breaking away of large parts of European Thrace from the Persian Empire after 479BC.

Around 560BC, the Athenians made their first foray into Thrace, with Miltiades visiting the Thracian Chersonese. Miltiades acquired a personal fief in the Chersonese, in alliance with some Dolonci, who had asked the oracle at Delphi whom they should invite to help them in their war against the Apsinthians, which was going badly for them. The oracle answered that they should take the first person to invite them into his home, who turned out to be Miltiades. Miltiades was the first to build a wall (7.24km long)

across the peninsula, from Kardia to Pactye, to protect his followers from invasion by the Apsinthii from the north. He ruled as a prince over a mixture of Thracians and Athenian followers. It has been suggested that the real story was that the Thracians invited the Athenians to build a colony there, and that it was Miltiades who consulted the oracle.[4] After his death, another Miltiades came from Athens and took control of the region through a ruse that enabled him to kill all the local leaders. He kept a body of 500 mercenaries and married Hegesipyle, the daughter of the Thracian king Olorus. After only two years, he had to leave, as the Skythians advanced as far as the Chersonese after throwing out Darius. He fled before they arrived. The Dolonci invited him back when the Skythians left, however.[5]

There were six phases of Persian conquest and reconquest between 513 and 492BC. All except the last one failed. The Persians often had to reconquer coastal cities, territories, islands, and fortresses. The first phase involved Darius' invasion of Skythia via the upper Hebros valley, in 513BC. This involved the subjugation of the Thracian Chersonese, Byzantium, and Chalcedon. Herodotus was not correct to say that all Thrace was under the Persian sway at this time, as only parts of the Black Sea coast and the Hebros valley had been conquered. An important royal fort was also established at Doriskos at the mouth of the Hebros River.[6]

The second phase involved the conquest by Megabazos of all the remaining states in the Hellespontine regions that did not yet bow to the Great King. In Thrace, this left the Persians in control of the lower Hebros and Doriskos. Megabazos then turned west, conquering all the cities and towns along the Aegean coast up to the Strymon River.[7] From the latter area, he then removed most of the Paeonians and transported them first to Sardis, and then to Phrygia.[8] Despite the difficulties involved, some of these were later able to escape back to western Thrace.[9] If others moved further east, this would account for the large numbers of Skudrians in the Persian tablets.[10]

Meanwhile it seems that the Hellespont had once more slipped out of the Persians' hands, for while Megabazos was escorting the Paeonians east, his replacement, Otanes, was reconquering Byzantium, Chalcedon, Antandros and Lamponeia in the Troad. He also reconquered Lemnos and Imbros. The fifth campaign was brought about by the conclusion of the Ionian revolt, in the early spring of 493BC. The Persians sailed up the Hellespont, and again laid claim to all the cities of the Thracian Chersonese, except Kardia, and the Propontis.[11] The last included several Thracian walled forts (the *teichea*). Balcer suggests that the ability of many Byzantines to escape the fourth conquest of their city by moving to

Mesembria on the Thracian Pontic coast implies that Darius' conquest of the Thracian Pontic shore was only ephemeral.[12]

The final phase of conquest was the most successful, with Mardonius marching from Sestos to the Strymon with a huge army.[13] Greek towns were reconquered and Persian garrisons established. Thasos was also taken. The fortress of Eion was established, some time before 492BC, and a bridge built across the Strymon. In 492BC, while they were encamped in Macedonia, the Brygi attacked them by night, and slew many of them, wounding Mardonius himself. Herodotus states that it was the heavy toll exacted by the Brygi that caused Mardonius to retreat.[14] Thrace was then securely in Persian hands until Mardonius' death at Plataea in 479BC. During this time, Thrace was ruled from Sestos, Eion, and Doriskos, all coastal locations, which indicates that little of Thrace north of the Rhodope mountains was controlled directly by the Persians.[15] Mardonius had intended to march to Greece, but lost the Persian fleet while it was rounding Mt Athos. After conquering Macedonia he therefore returned to Sestos.

The Fifth Century BC

Herodotus says 300,000 Macedonians and Thracians were in Xerxes' army.[16] A king of the Bisaltai tore out the eyes of his six sons because they were so eager to fight they joined Xerxes' army, even though their father had fled from Xerxes rather than submit to the Persians.[17] This demonstrates how much the Thracians loved their freedom, how savage they were, and how eager they were to fight. The Bithynian Thracians also had to contribute a supposedly 60,000-strong contingent to Xerxes' invasion of Greece in 480BC (6,000 would be a more likely figure).[18] However, Persian control was rather loose, and many Thracians resisted the Persian occupation during the next decade, even stealing the Persian sacred chariot and its horses. The passage of Xerxes' army caused great misery and distress.[19] As a result, only a few Thracians fought with the Persians at Plataea in 479BC.[20] After Plataea, the Thracians annihilated parts of the Persian army as they retreated through Thrace.[21]

Artabazos' decision to follow the inland route and cross to Asia from Byzantium suggests his fear of the hostile and rebellious Greeks and Thracians, and a concern for his safety at Sestos, the normal crossing point. Oeobazos, another Persian commander, was later sacrificed along with his attendants to the god of the Apsinthians while fleeing from Sestos.[22] Sestos and most of European Thrace except for the Chersonese was free of the Persian yoke by June 478BC, when the Hellenic League fleet sailed up the

Hellespont and captured Byzantium.[23] Eion fell to the Greeks late in 476BC,[24] and Doriskos probably soon afterwards. The Persians never returned, probably due to internal squabbles and pressure from the Greeks.

These Greeks had early in the fifth century begun to cast longing eyes on the mouth of the Strymon, the gate into the rich plains and richer mines of eastern Macedonia. But the powerful and independent tribe of the Edonians held the land, and at least two attempts to found a colony there failed disastrously before the attacks of the warlike natives. The first had come from Miletus in 497BC; the second was a combination under Athenian leadership in 465BC.[25] The city of Amphipolis was not founded until the Athenians, under Hagnon, made the third and successful attempt, in 437BC.[26]

The Persian invasion may have caused some impetus towards the formation of the first Thracian state. About 460BC the first Odrysian kingdom was founded by Teres I in south-eastern Thrace, in territory vacated by Persians.[27] In the last years of the reign of Teres, many of the Greek cities between the mouths of the Mesta (Nestos) and the Maritsa (Hebros), which had paid tribute to the Athenian Naval League as allies of the Athenians, reduced or stopped payment of their tribute. The principal towns involved were Abdera, Maronea, and Mesembria. It is thought that this occurred because they now depended on Teres, to whom they had to pay a tax. For this reason, and so as not to antagonize Teres, Athens consented to these payments being reduced or stopped.[28] He secured his territory in negotiations with the Skythian king Ariapeithes.[29] Ariapeithes was the son of Idanthyrsos, king of the Royal Skythians at the time of Darius' campaign in 512BC.

The Odrysai was the most powerful Thracian tribe, the only one to briefly unite almost all the others (including some of the Paeonians but not the Triballi). Most Thracian kings mentioned in ancient texts were Odrysian kings. Odrysian power was based in the central Thracian plain, where they built their capital, Seuthopolis. It was built on a Greek plan in the third century, near the modern town of Kazanluk.[30] It was formerly thought to be the only significant town or city in Thrace not built by the Greeks, but the discovery of Helis and other permanent settlements (some inside hill forts) has diluted this claim.[31] There were Thracian settlements at Kabyle and Philippopolis before the arrival of the Macedonians, but only Kabyle *may* have been anything like a town as we would know it. Seuthopolis was probably destroyed during the Celtic invasions of 279BC (there are signs that the city was burnt around that time), and is now submerged beneath the Koprinka dam.[32] The Odrysians left more than

thirty marvellous mound tombs nearby, in an area now referred to as the Valley of the Kings.[33] The most spectacular is a UNESCO site that includes glorious life-like paintings of Thracian cavalry and infantry.[34] A hill-fort that may have been the original base of Odrysian power is probably nearby, but has yet to be discovered or recognized as such.

Around 445BC Teres' son, Sitalkes the Great, succeeded him.[35] Sitalkes nearly fought a battle next to the Danube with his cousin, the Skythian king Oktamasades, but instead signed a peace treaty with him (and then attacked the Skythians in 429BC).[36] The Istros (Danube) river became the northern border of his kingdom, which he extended from the Strymon River on the Aegean to the Black Sea.[37] It had an annual income of 800 talents (half in coin, half in kind), which was only slightly less than that of the Athenian Empire.[38] The half that was in coin would have been sufficient to pay the annual wages of 7,500 mercenaries in Xenophon's time.[39] The kingdom was divided up amongst Sitalkes' brothers and their sons, who set up their own courts after Sitalkes' death. Principal amongst these was Sparodokos (464–*c*.444BC (Fol) or 445–435BC (Youroukova)), Seuthes' father and Sitalkes' elder brother. Archibald suggests Sitalkes had three sons: Sadokos, Teres, and Sitalkes, but none succeeded him.[40] An alternative interpretation is that each prince ruled part of the Thracian empire in the king's name. Another grandson of Teres, a certain Maisades, ruled the Thynians and the neighbouring tribes between the Maritsa (Hebros), the Black Sea, and the Propontis.[41]

During the Peloponnesian War, Thrace was an ally of Athens. The Thracians fought alongside both Macedonians and Athenians in some encounters.[42] The Spartans attempted to get the Odrysian king to change sides, but they failed, and Spartan ambassadors on their way to Persia were murdered in Thrace.[43]

In autumn 429BC Sitalkes, acting in response to an Athenian request, called up all Thracian troops south of the Danube. 150,000 warriors poured 'like a cloud of locusts' into Macedonia, carrying all before them.[44] Amyntas, the nephew of the Macedonian king Perdiccas, and Hagnon, an Athenian general, were travelling with the army. Sitalkes proposed to install Amyntas as the new king of Macedonia, while Hagnon was to command the allied Athenian fleet and army. Alarm spread throughout Greece. The peoples of central and northern Greece prepared for war; terrified enemies of Athens further south discussed what to do in the face of a combined Athenian-Thracian army.

However, Sitalkes had reached the Chalkidian peninsula to find that no Athenian army and fleet awaited him. Apparently the Athenians thought

Sitalkes was rather fickle and didn't expect him to fulfil his promise to attack the Chalkidian cities. That at least is Thucydides' reasoning. It seems likely, as it would have taken at least a month for the news to reach Athens, a fleet to be assembled, and for the fleet to get to Chalkidike. The Athenians would have had to send a fleet a long time before Sitalkes arrived if it was to get there at the same time as him, so the non-arrival of the fleet was premeditated. The storm season was just about to begin, which may also have deterred the ships.

Without the Athenians, Sitalkes was unable to take the Chalkidian cities. Instead, he forced the inhabitants to retire behind their fortifications while he ravaged their land for eight days. At the same time, as his army was running short of food and suffering from cold, he opened negotiations with Perdiccas. Perdiccas bribed Sitalkes' nephew and second in command, Seuthes, to advise a retreat. Sitalkes took Seuthes' advice, and, after only thirty days, the campaign ended. Sitalkes died in 424BC, during a war against the Triballi.

Seuthes had married Perdiccas' daughter and succeeded Sitalkes as Seuthes I in 424BC but although Seuthes raised the empire to its greatest height and the Greek cities along the Aegean coast continued to pay him taxes, he was unable to keep his empire intact.[45] It rapidly fell apart near the end of his reign. Information of doubtful reliability indicates that Seuthes I made war on the Athenian colonies in the Thracian Chersonese.[46]

Thracian alliances and troops continued to be important to the outcome of the Peloponnesian War. In 423BC the Athenians set out to attack Mende and Scione in the Chalkidian peninsula with 1,000 Thracian mercenaries, and some peltasts from their allies in the area - about half the total force.[47] In 422BC Thracians formed a large part of Brasidas' army that defeated Cleon at Amphipolis, leading to the Peace of Nicias. Thucydides tells of Brasidas calling to his standard 1,500 Thracian mercenaries and 'all the Edonian horse and peltasts.'[48] To meet these, Cleon asked Polles, king of the Odomantians, to bring as many Thracian mercenaries as possible.[49] The Odomanti are described as expensive mercenaries and 'the nastiest tribe in Thrace.'[50]

Later, in 413BC, 1,300 Dii peltasts arrived in Athens too late to sail with the main Athenian force headed for Sicily.[51] The Dii were the most warlike infantry in Sitalkes' army.[52] They were independent of the Odrysian Thracian king, but served him as mercenaries and volunteers. They lived in the Rhodope mountains north of Abdera. They were sent home, as they were too expensive to pay. They may also have caused some trouble for the local populace – it seems Thracian mercenaries were no

better disposed towards their hosts than other mercenaries. In the *Lysistrata* one of the characters tells how she saw a Thracian warrior swagger into the marketplace and, brandishing *pelte* and javelin 'like Tereus' (the savage Thracian son of Ares), made a fruit vendor so afraid she ran for her life – and let him take her total stock in trade.[53] The Dii were to be paid one drachma a day at a time when the citizen hoplite was probably paid about one and a half drachmas a day.[54] On their way home through Boeotia they were used first against Tanagra in a quick raid, and then against Mycalessos. Here they were responsible for one of the worst atrocities of the Peloponnesian War, killing everyone (including the children and dogs). When the Theban cavalry attacked them, they successfully defended themselves, 'dashing out and closing their ranks according to the tactics of their country.'[55]

Athens encouraged rival Odrysian princes to fight one another so that the Athenians could retain control of the coastal cities.[56] In 407/6BC the kingdom of the Odrysians appears to have been divided between the king Medokos (or Amatokos/Amadokos, 405–391BC) and his relative Seuthes II (405–384BC), who asserted his independence.[57] Aristotle says Seuthes attacked Amadokos while he was his general.[58] The situation was even more complex as, Xenophon says his army

> crossed over to the country of the Thracians above Byzantium, in the so-called Delta; this was beyond the domain of Maisades, being the land of Teres the Odrysian.[59]

On behalf of Athens, Alcibiades concluded an alliance with both of them for military assistance against the Spartans.[60] He used them to attack cities in the Hellespont. He knew the faults of Thracian troops well, for when he captured Selymbria he sent out his Thracian mercenaries, for fear that they would plunder the town.[61] He offered to bring 'great numbers' of Thracian cavalry and peltasts to assist the Athenian fleet at Aegospotami in 405BC (the Athenian generals rejected the offer and thus lost their fleet).[62]

By 404BC, it seems that in addition to the many Thracian slaves, large numbers of free Thracians were living in Athens.[63] The latter lived in the region of Munychia and supplied peltasts and other light troops to help Thrasyboulos in the war to restore democracy to Athens. Thracians (or people with Thracian names) were afterwards honoured as restorers of the democracy. Although they were not citizens, they had been treated favourably by the democracy and Athens had a long standing alliance with Sitalkes and his descendants. They may have been promised citizenship as

a reward for their actions.[64] Thrasyboulos formed his army (about a thousand strong) up on top of the hill of Munychia. The hoplites were in front, then the peltasts and javelin throwers, and behind them the slingers, 'of whom there were a great many, as this was the district where they lived.'[65] Although this army was smaller and the hoplites formed up only ten ranks deep, the hail of missiles and downhill charge enabled them to triumph over the oligarchs, who were formed up fifty ranks deep.

Thracian tribes destroyed many Greek colonies or made them pay tribute.[66] Alcibiades was one of many who gained popularity by building or rebuilding a wall across the Gallipoli peninsula to keep marauding Thracian tribes from threatening Greek cities of the Hellespont.[67] He amassed a great fortune by plundering the tribes that did not acknowledge either Thracian king.[68] It seems that this had no permanent effect, as a war against the Thracians of the Dardanelles was one of the excuses Cyrus the Younger used to gather a mercenary army for his revolt against Artaxerxes II, the Persian King.[69] In 401BC, Clearchus defeated the Thracians in a pitched battle, and from then on plundered and ravaged their land until Cyrus needed his army.[70] Nevertheless, at the Battle of Cunaxa, Xenophon reports forty Thracian cavalry[71] and some 800 Thracian peltasts (out of a total of 2,500 peltasts)[72] accompanying the 'Ten Thousand' Greeks in the army of Cyrus. Following Cyrus' death, Miltocythes the Thracian deserted to the Persians taking the cavalry and about 300 of the Thracian infantry.[73] The remaining 500 peltasts stayed with the 'Ten Thousand' on the march home and played a vital part in getting the army through the often-difficult terrain.

Medokos (based twelve days' journey inland from the sea) called himself the King of Thrace, but was unable to stop Seuthes II from hiring the survivors of Xenophon's army to get his own domain on the Black sea coast.[74] In winter 400BC, Xenophon visited Seuthes II in his *tyrsis* (fortified palace). The officers were invited to a drunken feast, during which Seuthes was presented with a white horse by a Thracian. The Thracians sang a Thracian war song called the *Sitalkas*, apparently composed in honour of Sitalkes or another early king. The Greeks agreed to help Seuthes in a short-term operation in south-eastern Thrace against the Thynians and other Thracians who had broken away from him.

Xenophon praised the Thyni, saying that they took the Odrysian king Teres' baggage train, despite the latter's large army.[75] He said they were supposed to be the most dangerous of all the tribes, especially at night fighting. The Thyni were also fond of attacking and wrecking shipping that passed their shores.[76]

All this did not help when they were faced Seuthes' large combined arms army, and they were soon subdued. Despite the booty taken, Seuthes could not pay the Greeks as much as he had promised. The Greeks left Seuthes' employ after only a few months' service, and those that did not go home crossed to Asia under the Spartan general Dercylidas in 399/8BC to fight the Bithynians.[77]

The Fourth Century BC

Despite the rise of Macedonia, the period 400–280 formed a sort of Thracian golden age, when the Triballi and Getai formed kingdoms in northern Thrace, and Thracian art flourished.[78] Splendid gold and silver vessels, ornaments, pectorals, helmets, and trappings for horses were produced. These still make a strong impression today with their elaborate workmanship and imaginative designs.

The Bithynian Thracians were nominally part of the Persian Empire, but had been independent since around 435BC, and by this stage they were giving their satrap, Pharnabazos, a lot of trouble.[79] In 398BC Seuthes sent about 200 horsemen and 300 peltasts to help fight the Bithynians.[80] These men received about 200 hoplites to guard their camp, while they went and grabbed their share of the plunder. The Bithynians responded with a dawn attack by cavalry and peltasts on the Odrysian camp. They hurled their spears and javelins at the Greeks, who, shut up inside the stockade, found themselves unable to reply. The Greeks broke down the fortifications and charged out, but could not catch the Bithynians. The latter fled from the charge but kept hurling javelins from both flanks; every charge merely caused more Greek deaths. Only fifteen hoplites escaped from this massacre.[81]

The attack on Bithynia was part of the Spartan war on Persia, led by their king Agesilaus. The Persians responded by stirring up Sparta's enemies in Greece. As a result, in 394BC Agesilaus was forced to return home, via Thrace. When he reached the territory of the Trallians, they demanded 100 talents of silver and 100 women to allow his army to pass. He merely asked why they were not ready to receive them, and slew great numbers of the Thracians in a pitched battle.[82]

The wily Athenian general Iphicrates fought against Agesilaus but became unemployed when peace was declared. He went to work in Thrace, restoring Seuthes II to his throne in 389BC, but Seuthes died soon after.[83] Iphicrates then fought for his son Kotys I (383–359BC), an energetic ruler, against Athens for domination of Aegean Thrace.[84] Kotys used many Greek

mercenaries but we are not told the size of the forces involved. Iphicrates married Kotys' daughter in a great ceremony in Kabyle and was given two coastal cities in recognition of his services.[85] In 383BC Kotys I seems to have restored the unity of the Odrysian kingdom. He grew so powerful he even claimed to be Apollo's son.[86] Ancient authors tell many anecdotes about Kotys, describing him as a very artful, irascible and hysterical man.

In 376BC, possibly by agreement with Kotys, more than 30,000 Triballi laid siege to the Greek colony of Abdera.[87] The Abderites sallied forth and slew more than 2,000 of them as they returned home laden with booty. However, the Triballi rallied, the Abderites drew up their lines opposite the tribesmen, and a stubborn battle took place. The usual Thracian inhabitants of the region (Edonians, Bistonians, Ciconians, or Sapaeans) aided the Abderites, but these Thracians suddenly changed sides, and the Abderites were butchered almost to a man. The Triballi were about to follow up their victory with another attack on the town when the Athenian general Chabrias suddenly appeared with troops, and drove them away. Chabrias negotiated a peace between the Triballi and the king of Maronea, thus winning the Triballi to the Athenian side.[88]

In the course of his reign, Kotys tried to seize the Thracian Chersonese, and had some measure of success, taking Sestos. Unfortunately in 362BC Miltocythes, his commander in the Chersonese (a Thracian prince), revolted, seized his treasury in the fortress of Hieron Oros (48km from Perinthus) and raised a mercenary army. Miltocythes also controlled Sestos and Crithote. He allied himself to the Persian satrap Ariobarzanes, who was in revolt against the Great King.[89] Miltocythes requested aid from Athens, offering them Sestos, and the Athenians responded by instructing their general Autocles to help him as long as it didn't upset Kotys. Kotys was an Athenian citizen and he asked the Athenians for help against Miltocythes. While Autocles was getting ready to go to the Thracian Chersonese, Kotys marched on Sestos and Crithote. Miltocythes, seeing that the Athenian help wasn't going to arrive in time, handed over Sestos and Crithote to his Persian ally (who sent troops to help him) and fled to Hieron Oros.

Iphicrates fought in a naval battle for Kotys against Miltocythes, saving the king's life (and probably winning the battle). Kotys was then able to lay siege to Hieron Oros, and Miltocythes disappeared in spring 361BC. Iphicrates had 8,000 men in Thrace at one stage, but we don't know if this was when he was in Kotys' service or when he was campaigning in the same area on Athens' behalf.[90] Many of Iphicrates' victories were gained using peltasts as the main arm, but what Kotys needed was hoplites, and these probably formed the mainstay of his mercenary force. After

Iphicrates baulked at invading Athenian territory, Kotys sacked him, hired the Athenian general Charidemos, and married the latter to one of his daughters.

After getting his treasury back, Kotys planned to also get back Sestos and Crithote from Ariobarzanes and enlisted the support of Ariobarzanes' enemy Autophradates. Autophradates attacked the cities on the eastern shore while Kotys attacked the lands on his side of the Dardanelles. Ariobarzanes responded by asking for help from the Athenians and Spartans, who readily agreed. Timomachus was sent with an army from Athens, and the Spartans sent Agesilaus to negotiate with Autophradates. Agesilaus was successful, and Autophradates retreated.[91]

Nevertheless, Kotys was able to take Sestos in spring 360BC. The Thracians were at the peak of their power. The Athenians were so dismayed at this news that they prosecuted their three generals responsible for the region: Timomachus, Autocles, and Menon. Kotys stood astride Athens' lifeline and planned a joint invasion of Macedonia with the Illyrians and the Paeonians.[92] His further dreams of empire were ended when two inhabitants of Ainos (with a grudge against Kotys) assassinated him in mid-360BC. The plot was an Athenian conspiracy (probably involving Miltocythes) but failed to stop the war for the Thracian Chersonese.[93] Charidemos showed none of Iphicrates' scruples and was attacking Crithote and Elaeus (both regarded as Athenian possessions) when he learned of Kotys' death. He immediately marched with cavalry and infantry to the Thracian capital where his ward Kersebleptes was installed on the throne. The latter continued Kotys' policies and maintained Charidemos in his employment. Charidemos launched a surprise attack on the Athenian fleet with his peltasts. He also fought Miltocythes, who had reappeared.

Miltocythes raised a mercenary army under Smicthyion against Kersebleptes but after a year he was betrayed by Smicthyion to Charidemos and executed.[94] Disagreements with Amadokos, the heir of Medokos, led once more to the disintegration of the Odrysian kingdom. It was divided amongst Kersebleptes and his brothers, Amadokos and Berisades.[95] Amadokos ruled between the Nestos and Hebros rivers, while Kersebleptes controlled the lands further east. Berisades ruled the westernmost part of Thrace (between the Nestos and Hebros rivers), on the border with Macedon.

The Thracian state was therefore in a weak condition, ruled by squabbling princes, just as their nemesis Philip II ascended the throne of Macedonia (in 359BC).[96] Nevertheless at the time it seemed that Macedon

was prostrate and about to be carved up by its neighbours. Philip was equal to the task. He met Kotys just before the Thracian king died and bribed him to stop his planned invasion. Philip similarly dealt with the Paeonians by paying them off, then, a year later, when their king Agis died, he invaded their lands and defeated them in a quick campaign. He forced them to be his ally and provide troops for his army.[97] Even after Kotys died Philip didn't have to worry about Thracian invasion as Berisades and Amadokos made a joint effort to remove Kersebleptes from his dominant position in Thrace.

Kersebleptes was also distracted by the continuing war with Athens. Iphicrates had switched sides and was soon carrying off a great deal of loot from Odrysian territory, pursued by a large cavalry force. Having few horsemen himself, he gave them burning torches and told them to charge the Thracians. The Odrysian horses could not stand the flames, and fled.[98]

The war between Athens and the Thracians ended in 357, when Athens allied with the three rulers of Thrace.[99] At the treaty negotiations, each Thracian prince was represented by his own Greek mercenary general: Kersebleptes by Charidemos; Berisades by Athenodorus; and Amadocus by Bianor and Simon (who were married to his daughters).[100] Around this time, certainly before 352, Berisades died. The next year, Athens concluded an alliance against Philip II with Ketriporis, son of Berisades, as well as with the Illyrians and the Paeonians.[101] Ketriporis began attacking Greek towns in the Daton plain, including Krenides. Kersebleptes tried to ally with Philip (in accordance with Charidemos' plan to eliminate first his brothers and then the Athenians). However, Philip II defeated the coalition and acquired Mount Pangaion's gold and silver mines, which had been exploited until then by the kings of south-western Thrace (mainly the Edonians). Despite all these upheavals the Thracian kings remained relatively wealthy and powerful, as can be seen from their temple, fortress and tomb complex at Starosel (nick-named 'the Bulgarian Machu Picchu' by its discoverers).

Starosel is near Hissar in the mountains of central Bulgaria. Amatokos' enormous two-chamber temple/tomb is surrounded by a 263m-long wall made out of 4,000 stone blocks and was hidden under a 20m-high mound of earth. A parade staircase, flanked by two smaller staircases, climbs to an 11-metre roofless doorway with 5.5m-high walls. This leads to the facade and entrance corridor. The interior consists of a rectangular entrance and a round vaulted main hall, whose ceiling is supported by ten Doric semi-pillars, each carved with ten vertical flutes. Ornate stone plates cover the inner walls. The dome is decorated with a stone frieze in red, black, green

and blue colours.

Inside, archaeologists found a magnificent trove of gold and silver relics, plus bronze shields, helmets and swords, greaves (decorated with the royal double-edged axe symbol), scale armour, bronze javelin tips, a quiver full of bronze-tipped arrows and two sets of silver decorations for horses. A large silver appliqué was found in the entrance depicting a fully-armed Thracian king with a beard but no moustaches, riding a horse and raising a rhyton in one hand. These were dated to the fourth century BC. Other tombs were found in the vicinity, thought to be Amatokos' relatives, including Teres II (351-341BC). One had a golden sarcophagus cover, and another contained armour and weapons.[102]

Now the mines financed Philip's conquests. Philip attacked and subjugated the Thracian princes one by one, beginning with Ketriporis. Ketriporis' domain was annexed, and Krenides re-founded as Philippi. Philip deliberately acquired a string of cities, towns, and forts that restricted the activities of the Thracian monarchs but his diplomatic activities, in which he supported usurpers against them, were even more important. Chares, on behalf of the Athenians, and Charidemos countered by fortifying and strengthening sites east of the Nestos river[103] but this probably worked in Philip's favour when they eventually fell into his hands. With Philip's connivance, Ketriporis would be replaced by his brothers, and Amadokos replaced by Teres.[104] Meanwhile the eastern anti-Macedonian coalition fell apart, and war between Kersebleptes and Athens continued until they made peace in 353BC.[105] It was difficult for Kersebleptes to win because he could not match the Athenian fleet. Kersebleptes handed over the cities on the Chersonese except Kardia to Athens.[106]

Kersebleptes may have been secretly working against Philip in 355BC as his two sons Medistas and Teres were granted *prozenoi* status by Delphi during the Sacred War, when Delphi (controlled by Phocis) was at war with Philip. Kersebleptes followed a policy of reducing Hellespontine cities bordering on his territory and of ravaging their lands. He made war on Byzantium, Perinthus and Amadokos. Philip stopped this when he moved against him (probably as Amadokos' ally) with a large force. In 352BC Philip forced Kersebleptes into alliance with him and took his son hostage.

Disputes between the Thracian princes continued. Amadocus and Kersebleptes were forced to accept Philip's rule when they asked Philip to arbitrate in a dispute and Philip arrived with his army. Philip II campaigned against Amadocus and Kersebleptes in 347/6BC, sending first his general Antipater and later taking control himself. When Athens recognized his

territorial acquisitions it allowed him to pursue new conquests in the north of the Balkan Peninsula. After three years, Kersebleptes seems to have recovered strength sufficient to revolt against Philip. Accordingly, in 343BC, Philip again marched against him, defeated him in several battles, and reduced him to the condition of a tributary.[107]

Kersebleptes may also have been mortally wounded in one of these battles, as he died that year. From the skeletal evidence he is thought to have died at the age of 40 or 45 from blood poisoning (after suffering from an unknown disease for ten years). King Kersebleptes is now displayed in Tekirdag Museum, dressed with his original purple clothes. He was found in Harekattepe Tumulus in Tekirdag province (not far from the site of Perinthus) with two crowns (symbolizing his dual kingship and priesthood), and many rings.

Philip conquered southern Thrace in 341BC, founding Philippopolis (Plovdiv), Kabyle (near Yambol) and other cities on top of older Thracian settlements.[108] The mountain Thracians continued to oppose Macedonian rule. Philip's son Alexander gained his first command in 340BC fighting the Maidi, while Philip's generals Parmenion and Antipater fought the Tetrachoritai (a tribe of the Bessi) towards the end of that year.[109]

Northern Thrace remained free of Macedonian control. In 339BC the Triballi defeated and wounded Philip when he tried to cross the Haemus (Balkan) Range while returning from a campaign against the Skythians.[110] The Thracian tribesmen refused to allow him through unless they received a share of his booty. One of the pursuers thrust a *'sarissa'* through Philip's thigh, killing his horse, and laming him.[111] He survived the pursuit because he ordered his rear rank to lower its spears and remain in place, while the rest of his troops retreated.[112] The wound was probably in Philip's right leg.[113] As well as the wound, Philip brought back from this trip a Thracian wife, who bore him his idiot son Philip Arrhidaeus (later Philip III). She was a Getic princess, given by one of the kings of the Getai, a certain Kotylas, as a peace hostage.[114]

Hellenistic Era

From the third century BC, Thracians feature more as auxiliaries in other armies, as allied or subject troops, than fighting on their own account. The Thracian aristocracy were very prosperous during this time, with the greatest number of gold and silver items (coins, silver and gold ware, bridle sets etc.) in Thracian history being buried between 340–280 and *c.*190–70BC.[115]

Philip died in 336BC, and the Thracian tribes rose in revolt against his

son Alexander III (the Great). They again plotted to invade Macedonia in cooperation with the Illyrians, but Alexander forestalled them by quickly marching into Thrace.[116] He defeated the mountain tribes and continued north.[117] There he caught the Triballi while they were making camp. They are thought to have buried the Rogozen Treasure (over 100 beautifully decorated gold and silver bowls) at this time.[118] They took shelter in a wood by the River Lynginus. Alexander ordered his lightly armed archers and slingers to move up and shoot into the woods. The Triballi surged forward to get to grips with the Macedonian archers, whereupon Alexander ordered Macedonian cavalry to attack the right wing of the Triballi, and Greek cavalry to attack the left. The rest of his cavalry attacked in the centre, followed by the main body of his infantry, led by Alexander himself. The Triballi held their own while the fighting was at long range; but were ridden down by the cavalry and routed by the phalanx once they came into contact. Three thousand Triballi were killed. King Syrmus, the Triballi, and other Thracians, took refuge on an island in the Danube.[119]

Alexander manned warships with heavy infantry and archers, and attempted to force a landing. However, there were not enough ships and men; in most places the island shore was too steep for a landing, and the current was too strong to deal with. Alexander accordingly withdrew the ships and attacked the Getai instead.[120] The Getai held the riverbank against Alexander with 4,000 cavalry and 10,000 foot. Alexander gathered together many boats normally used by the local Thracians for plundering and raiding, and crossed at night with about 1,500 cavalry and 4,000 infantrymen. The daring crossing by so many men took the Getai totally by surprise. They were shocked to see the Danube so easily crossed, and unnerved by the sight of the phalanx advancing upon them in a solid mass. The first violent cavalry charge led them to turn and flee to their town; but the town had few defences, so they abandoned it. Taking with them as many women and children as their horses could carry, they continued their flight into the steppes. Alexander plundered the town, razed it to the ground, and made camp. There he received envoys from various tribes in the area, including the Triballi, who soon after sent troops to join his army.[121]

Thracian warriors were critical to Alexander's success, forming about one fifth of his army (twenty-five per cent of the infantry and twenty per cent of the cavalry to begin with) and took part in almost all his battles. Of the forces that crossed to Asia, there were 7,000 Odrysians, Triballi, and Illyrians, plus 1,000 archers and Agrianians (a Paeonian tribe) out of a total of 32,000 foot soldiers.[122] There were also 900 Thracian and Paeonian

scouts, out of a total of 4,500 cavalry. A further 500 Thracian cavalry joined Alexander's army while it was at Memphis.[123] A body of Odrysian horse (probably heavy cavalry), was likewise present.[124]

The Agrianians in particular were given many critical missions. For instance, during the siege of Tyre Alexander took only 'the shield bearing guards and the Agrianians and set out to Sidon'.[125]They were given the crucial flank attack on the Persian Gates.[126] They were also on the right flank in nearly all the battles, usually brigaded near the Companions or Royal Guards. At the Battle of the Granicus, they were particularly deadly in the stationary cavalry battle, making their way in amongst the horsemen.

Before the Battle of Issus (333BC) we find Alexander using the 'light-armed Thracians' to reconnoitre the mountainous surroundings of the Cilician Gates,[127] and at the subsequent battle the same source puts the Thracians in the van of the army.[128] At the Battle of the Granicus in 334BC, Alexander deployed the Thracians on his left flank, but they were not engaged during the battle.[129] Thracian cavalry took part in his rapid march to Miletus,[130] and Thracian javelin-men screened the Macedonian left flank in battle against the Pisidians.[131] Alexander's Thracians were again posted on the left wing at the Battle of Issus, this time brigaded with Cretan archers.[132] They were on the left wing at Gaugamela (331BC), when the savage Thracians (cavalry and infantry) helped beat off a sustained attack by superior numbers of Persian cavalry.[133] However, the Thracian infantry had mixed success defending the baggage against the Indian cavalry.

Although many other troops were allowed to return home before or during the march to India, the Thracians stayed on. Six hundred Thracian cavalry and 3,500 Trallians joined Alexander after he left Babylon.[134] The javelin-men and Odrysian cavalry were left to garrison Media.[135] Three thousand infantry and 500 horsemen would be left as a garrison on the Indus River near the present day city of Rawalpindi. They remained in India until 317BC, after which they came back to Asia Minor, where they joined the mercenary armies of Alexander's successors.[136] At the Battle of the Hydaspes (326BC), the Thracian light infantry attacked the Indian elephants with *'kopides'* (curved swords or *rhomphaias*)[137]

Alexander also had Thracian officers in his army, commanding their own nationality. For instance, Sitalkes started as a commander of Thracian javelin-men in the battle against the Pisidians[138] and at the Cilician Gates[139] and again at the Battle of Issus.[140] At Gaugamela he and his troops fought on the left flank, supported by Thracian and Greek cavalry. As Arrian refers to the Thracian infantry separately (they had orders to guard the pack animals) and it would be unusual to speak of cavalry supporting infantry,

perhaps by this stage Sitalkes was commanding cavalry, or at least a mixed body of cavalry and javelin-men. After Gaugamela he was left with his troops to garrison Media and would later be one of the generals who executed Parmenion.[141] The association with Parmenion stuck and he (and his fellow executioners) was executed on Alexander's return to Media.[142] The reason given was because of the unruly behaviour of his troops in Media (including plundering tombs and temples, rape, and other violent crimes). According to Curtius, 600 of the executioners' followers were executed with them.[143]

While Alexander was away, Thrace boiled with rebellion. In 331/30BC it was with the participation of Memnon, Alexander's *strategos*, and the Odrysian ruler Seuthes III. Memnon raised a large Thracian army. He was outmanoeuvred by Antipater, but came to terms with him so favourable that in 325BC Memnon led 5,000 Thracian cavalry to join Alexander in India.[144] In 331 or 325BC Zopyrion, governor of Thrace, and his 30,000-strong army (probably mostly Thracian allies) perished in a campaign against the Getai and Skythians (Curtius blames the 'sudden onset of squalls and stormy weather' for this loss – maybe he was on a ship).[145] They had advanced as far as the Dnieper and (due to faulty Greek geographical notions) may have thought they would soon link up with Alexander. In response to this setback, Seuthes III 'drove his subjects, the Odrysians, to rebellion' and Thrace was almost lost to the Macedonian empire.[146] After Zopyrion's death Lysimachus became governor but Thrace wasn't made a separate satrapy until after Alexander's death, in 323BC.[147]

It would appear that the Odrysian kings were in the habit of placing their own trusted chieftains at the heads of the individual Thracian tribes, while the Macedonians tried to depend on the lesser dynasts. Because of this, rulers on both sides of the Haemus (Balkan) range formed alliances in the time of Lysimachus. Seuthes III, who ruled the Odrysian heartland south of the Haemus range, formed one of them, while Dromichaetes, ruler of the Getai, north of the Haemus, headed another. There were major clashes between the alliances and Lysimachus in which neither he nor the Thracians got the upper hand.[148] The scene painted on the *dromos* of the Kazanluk tomb may reflect these conflicts, periods of peace, and shifting alliances. The two central infantrymen hold their weapons in such a way as to indicate an alliance or peace treaty between the Macedonians on the left, and the Thracians on the right. The balanced representation of the warriors – with similar numbers on each side and none of the usual images of men being trampled by cavalry - expresses equality between the two sides.

When Alexander died in 323BC, Lysimachus tried to secure his hold on

Thrace by an attack on the army of Seuthes III. Lysimachus, with only 4,000 infantrymen and 2,000 cavalry, suffered severe losses, but claimed victory over a Thracian army of 20,000 infantry and 8,000 cavalry. Lysimachus was superior to them in the quality of his troops and the battle was a stubborn one. After losing many of his own men but killing many times that number, he returned to his camp with a doubtful claim to victory.[149] Seuthes III continued to reign parallel with the Macedonian rule established in some of the garrison cities, building Seuthopolis in 320BC.[150] He appears to have regarded himself the equal of any other Hellenistic monarch, and the grandeur of his tomb (and its contents) indicates that he was very rich and powerful. Nevertheless Lysimachus had access to large numbers of Thracian troops. He may even have included Thracians in his phalanx.[151]

The Western Pontic Greek cities, Thracians, and Skythians allied against Lysimachus in 313/12, but he quickly marched to meet them and subdued each in turn before they could combine their armies. He terrified the Thracians into changing sides, but on his way home found his unwilling former ally, Seuthes III, guarding the crossing over the Haemus (presumably the Shipka Pass), with many soldiers. Lysimachus lost many of his own men in a battle that lasted a considerable time, but destroyed a vast number of Thracians and won.[152] In 309/8BC Lysimachus founded his capital, Lysimacheia, in the Thracian Chersonese,[153] and shortly afterwards (306BC) declared himself King of Thrace. He attacked the Getic kingdom of Dromichaetes in 293/2BC, but was captured and released in exchange for territorial concessions. The Getai showed him what tough fellows they were by eating out of wooden bowls, while giving the 'soft' Macedonians gold and silver vessels to eat out of, and draped couches to sit on.[154]

Many other battles in the struggle for Alexander's empire involved Thracian troops. Eumenes deployed Thracians on his left flank at the Battle of the Hellespont in 321BC.[155] At Paraitakene (317BC), 500 Thracian cavalry fought on one side and 1,000 cavalry fought on the other (possibly colonist Thracians verses native Thracians – the native Thracians won). At the same time, Diodorus[156] says that Peucestes, Satrap of Persia had 600 Greek and Thracian cavalry.[157] Demetrius probably had Thracian light cavalry in his refused right flank for the fight against Ptolemy at Gaza in 312.[158]

In 310BC, Thracians appeared in Skythian service. Diodorus records 2,000 Thracians and 2,000 Greeks serving with Satyrus against the Thateans at the Battle of the River Thates. Although the Thracians and Greeks were pushed back during the battle, Satyrus' Skythians were finally

victorious.[159]

Third and Second Centuries BC: The Beginning of the Roman Era

In 279BC the Celts irrupted into Thrace, burnt Seuthopolis, and founded a kingdom of their own with Tylis as its capital, close to Byzantium.[160] The Thracian aristocracy fled to the Greek colonies on the Black Sea.[161] The Macedonian king, Antigonos Gonatas, defeated the Celts near Lysimacheia in 277BC, but the Thracians did not destroy the Celtic kingdom until 214/13BC.[162] Even though the Celtic kingdom lasted less than forty years, significant Celtic influence is apparent afterwards in Thracian dress, weapons, armour, and burial practices. For instance, they would ritually destroy weapons before placing them in graves, and they wore torcs.[163] The city of Kabyle appears not to have been damaged by the Celts and indeed seems to have prospered under them. Coins in the name of the last Celtic king of Tylis, Cavarus, were minted there, and some Bulgarian scholars think that Kabyle may have been the site of Tylis (though most scholars think it was nearby in Turkish Thrace, e.g. at Bizye).[164]

The Seleukid king Antiochos II (261–246BC) ruled the lower course of the Hebros and the Thracian Chersonese, including Lysimacheia and Kabyle, for a short time.[165] Thracians fought for (and against) him at the siege of Kypsela – this is one of several examples where the Thracians switched sides in a battle[166] – and again fought each other at the Battle of Raphia in 217BC. Here, the right-flank Ptolemaic Thracians defeated the 2,000 left-flank Seleukid Thracians. There were 6,000 Thracians and Gauls in Ptolemy's army, and another 1,500 Agrianian and Persian archers and slingers in the Seleukid army.[167]

Thracians and Gauls were by far the two most popular nationalities to be employed as mercenaries by the Successors.[168] There was also a permanent 'Thracian' regular cavalry regiment (hipparchy) in the Ptolemaic army (including that of Cleopatra). This may have indicated a fighting style, rather than the nationality of the troops.[169] Herod (the Hellenistic monarch of Judea) also had a Thracian mercenary cavalry regiment.[170]

Raphia was one of the last times the Successors could fight each other without Roman interference. Philip V of Macedon (221–179BC) occupied all cities in Thrace up to the Hellespont. The destruction and abandonment of defence structures in the western fortifications of Kabyle date from his campaign at the beginning of the second century BC.[171] His success caused

Pergamon and Rhodes to launch a successful diplomatic offensive to get the Romans to attack him.[172] Philip was unable to use significant numbers of his troops against the Romans because he had to guard his eastern borders against constant Maidi incursions.[173] He allied with Hannibal, and after a number of skirmishes met the Romans at the Battle of Cynoscephalae in 197BC. At that battle, he had 2,000 Thracians in his army. The Thracian peltasts won skirmishes against Roman and allied Greek troops, and helped to push back the Roman left wing. In spite of this, Philip's phalanx was shattered, and he lost the battle.[174] Here the Thracians and/or the Illyrians were Trallians. From then on, Philip was obliged to be a Roman ally and assisted them against Antiochos III.

Apparently the Romans had loosened Macedonian control on Thrace, for when Antiochos III the Great of Syria crossed the Dardanelles; he had to free the Greeks who were under subjection to the Thracians.[175] Antiochos conquered most of Greece but soon after the Romans threw him out of Europe and chased him to Magnesia (not far from the old Persian capital of Asia Minor, Sardis). Here, in 190BC, Antiochos met them in battle. He broke through the Roman left flank but, instead of turning on the Roman army, pursued as far as the camp, where 2,000 Thracian and Macedonian infantry stopped him from capturing the Roman baggage.[176] This allowed the remainder of the Seleukid army (which included 1,500 Trallians) to be wiped out by the successful Roman right wing and centre.

As a result of that battle, the Seleukid kings were forbidden from recruiting west of the Taurus Mountains, but they still had Thracians in their army afterwards.[177] In 163BC Gorgias, Seleukid general of Idumaea, had command of 3,000 infantry and 400 cavalry during the Battle of Marissa, and at least some of the cavalrymen (and possibly all the infantry) were Thracian.[178] There were 3,000 Thracian infantry at the Daphnae parade in 165BC, though that may just be a coincidence. They may have been from the 3,000 Thracian military settlers in Persis.[179] In 166BC a Seleukid officer named Scron launched an attack against the Jewish rebels.[180] It has been suggested that Scron may have been a Thracian like his troops.[181]

After the Battle of Magnesia, 10,000 Thracians drawn from the Astii, Caeni, Maduateni and Coreli tribes occupied each side of a narrow forested pass and waited for the returning Roman troops to march along the Hebros valley in southeastern Thrace. They waited until the vanguard had passed, then attacked the baggage and, killing the escort, began to loot the wagons. The Romans of the vanguard and rearguard rushed to help, and fighting began at several points. The battle swayed from one side to the other

according to the terrain, the numbers involved, and the courage of the combatants. The booty hampered the Thracians, as most of them left their arms behind so they could carry away more spoils. The unfavourable ground, on the other hand, made the Romans vulnerable to the Thracians.

> Many fell on both sides and night was already coming on when the Thracians drew off from the fight, not to escape wounds and death, but because they had as much plunder as they wanted.[182]

When the Romans marched into another precipitous pass, the Thrausi tried to get their share of the plunder, but this time the terrain was bare of trees and did not allow an ambush. The Romans were prepared for them. Charging in close order, they drove the Thracians back and then put them to flight. The narrowness of the pass crowded the fugitives together, and there was much slaughter.

The Romans marched warily on for a few days. Then, when they had reached more open ground, 15,000 Thracians sought to oppose Muttines the Numidian, who was scouting ahead of the main army. He had 400 Numidian cavalry and a few elephants. Muttines engaged the Thracians with his elephants in the centre and cavalry on the flanks. Muttines' son, with 150 picked troopers, rode through the middle of the Thracians, then attacked their rear, and created such disorder amongst them that they never got near the main body of infantry.[183]

The Bastarnae (either Celts or Germans and 'the bravest nation on earth'[184]) now marched south through Thrace at Philip's request, but in 179BC Philip died and was succeeded by Perseus. They soon came to blows with the Thracians, who were forced to flee up a mountain. The Bastarnae followed them, but were defeated with the help of a thunderstorm.[185]

Perseus rebuilt the Macedonian army, and in 171BC was joined by Kotys, king of the Odrysai with 1,000 picked cavalry and about 1,000 infantry.[186] Perseus already had 3,000 'free Thracians under their own commander' in his forces.[187] These fought 'like wild beasts who had long been kept caged'[188] at the Kallinikos skirmish that year, defeating the Roman allied cavalry. They returned from battle singing, with severed heads as trophies.

In 168BC Perseus' riverbank guard of 800 Thracians started the Battle of Pydna in typically Thracian manner - an argument midstream over a baggage animal that had escaped its Roman groom escalated to full-scale combat.[189] Thracian infantry also led the Macedonian army out of camp; and 200 Thracian and Cretan archers fought on the Roman side. The

Thracian infantry were probably deployed on the Macedonian left flank.[190] The performance of the Thracian cavalry was less remarkable – they are only mentioned when running away.[191] Full accounts of the battle by Polybius and Livy have been lost, so what they did during the battle is unknown.[192] Nevertheless, the cavalry (deployed on the Macedonian right with the Royal Guard) survived the battle virtually unscathed, which means that they were held back in reserve and ran away without a fight; or must have made a good account of themselves, as they were outnumbered and probably had to face elephants and the more heavily armoured Pergamene cavalry. Perseus lost this battle, and Thrace west of Hebros was incorporated into Macedonia, which was partitioned.[193] From now on Thracian kings used Roman troops to secure their regime, acted only with the approval of Rome, and their children were held hostage there.[194]

The Second and First Centuries BC: the End of Thracian Independence

Revolt after revolt plagued the Romans for the next two centuries, but they only extended the Romans' power. First there was an initially successful rising against Roman rule in Macedonia in 149/8BC, led by Andriscus (Pseudo-Philip).[195] The Thracian king Teres presented him with a troop of 100 soldiers, and placed a diadem on his head. He took part in the uprising, which was soon crushed.[196] In 119BC the Scordisci (a mixed Thracian, Illyrian, and Celtic tribe[197]) and Maidi invaded Macedonia, defeating and killing the governor. The Scordisci would be conquered in their turn during 110–107BC by M. Minucius Rufus, who took control of the whole Hebros area and crushed the Bessi.[198] Thracian cavalry are recorded switching sides in 109BC while on campaign in Numidia, when two mercenary squadrons were bribed to let Jugurtha into a Roman camp.[199]

The most dangerous Thracian attack occurred in 91BC, when Sentius, the Roman governor of Macedonia, was kept busy by several Thracian incursions, one of which reached as far as Dodona.[200] In 77/6BC the proconsul of Macedonia, Appius Claudius Pulcher, was killed in a battle with the Maidi.[201]

A rather different threat to Roman rule in Thrace came from Mithridates VI of Pontus. He was very popular with the Thracians. The Thracian cities allied with him and he had a lot of Thracians in his army.[202] His first war against Rome began in 88BC, but his involvement in Thrace began in 110–100BC, when he extended his rule over the northern coast of the Black Sea.[203] His campaign was a disaster for Thrace, as when he was thrown out of Europe the Romans came back to Thrace not as meddlers in

internal politics but seeking retribution and conquest.

In 74–71BC Lucullus marched along the western Pontic coast. He conquered and plundered Kabyle and the Greek cities even though they had switched sides, and were now his allies.[204] Roman rule became more firmly entrenched over a wider area of Thrace, and many of the Greek cities of Thrace lost their independence permanently. Later, while Lucullus was campaigning in Pontus, he used Thracian cavalry to successfully charge Armenian cataphracts in the flank.[205] Despite his numerous defeats, Mithridates did not lose favour with the Thracians. When Mithridates made a surprise attack on the Roman army, Thracian mercenaries that had served Mithridates, but were now in the service of Marcus Fabius, switched sides. The Roman army only survived because Mithridates was wounded.[206] Mithridates never gave up on trying to defeat the Romans but was eventually confined to the northern shores of the Black Sea and committed suicide.

Between 73 and 71BC there was a major slave revolt in Italy led by Spartacus, a Thracian gladiator. Being a 'Thracian' gladiator could mean that that was his gladiatorial style, not his nationality, so he may not have been Thracian at all, despite his name. As Spartacus seems to have had some military training, it is possible that he fought with the Roman army as an auxiliary or even in the legions. Fol's theory is that Spartacus (Spartokos) was a Thracian aristocrat captured during the wars against Mithridates. He highlights the strong links between the Bosporan kings and the Odrysian kingdom – including five kings named Spartokos that ruled the Bosporan kingdom between the fifth and second centuries.[207]

In 61BC the Greek coastal cities, supported by the Getai and Bastarnae, revolted against the Romans and defeated them near Histria.[208] Many of the mountain tribes and people north of the Danube remained free and continued to cause trouble. In 57–55BC a Thracian/Illyrian army consisting of Maidi, Dentheletai and Dardanians made incursions into Macedonia and reached Thessaloniki.[209] About 56 to 54BC, the Getai organized a powerful military and political alliance under Burebista. The Romans were again defeated near the Danube River in 62/1BC, when the Macedonian governor, G. Antonius Hybrida, marched into Thrace. The next year it was Gaius Octavius (father of the emperor Augustus) who returned the favour, defeating the Bessi when they attacked Macedonia.[210]

In 29/8BC a Bastarnae/Dacian invasion south of the Danube was repelled by the proconsul of Macedonia, M. Licinius Crassus, (grandson of the Crassus who defeated Spartacus). He conquered the Danube plain all the way to the Haemus Mountains.[211] Around this time (15BC) Rome

subjugated the north-western regions of Thrace. The Roman province of Moesia was created. It incorporated present-day eastern Serbia, northern Bulgaria and south-eastern Romania. It was named after the Moesi, who lived in eastern Thrace, in the plains bordering the sea and the Danube. The south-eastern parts of the country became a Roman protectorate ruled by the Odrysian kings.[212]

In 15 or 13BC there was an uprising of the Bessi in Thrace, led by the priest in the sanctuary of Dionysus, Vologaesus. They killed the Thracian king, but the end result was that the border of the Roman Empire was moved to the Upper Danube.[213] This did not stop them from trying again in 11BC, when L. Calpurnius Piso was called from Pamphylia in Asia Minor to squash another Bessi rebellion.[214] After this rebellion had been crushed, the Thracians 'showed their mad rage even in captivity; for they punished their own savagery by trying to bite through their fetters.'[215] In AD26 Poppaeus Sabinus put down a revolt of southern mountain Thracians (probably Bessi) with the help of the Thracian king Rhoemetalces II. The Thracians retreated to a mountain fortress where the braver spirits 'capered and chanted in front of their lines according to their national custom'[216] but despite a brave defence could not dislodge their besiegers, and some committed suicide rather than be taken prisoner.[217]

Roman Era

The Thracian kings accelerated the Roman conquest by their own confusing dynastic squabbles. Sometimes there were three Thracian kings ruling at once. For instance, when Rhoemetalces I died in AD 12 the Romans entrusted the Odrysian territories north of the Haemus to Rhaskouporis, and those to the south to Rhoemetalces' son, Kotys. War soon broke out, and in AD 19 Kotys was killed by Rhaskouporis. Rhoemetalces II, the son of Rhaskouporis, received the lands to the north of Haemus, while Kotys' children got their father's lands.[218] However, they ruled over them under the guardianship of the Roman propraetor. There was another anti-Roman uprising of Odrysians, Dii and Koilaletai in Thrace during AD 21. Probably this was the one that Florus called the most serious rising, partly because it was led by King Rhoemetalces, but mostly because he had accustomed the Thracians to discipline, the use of military standards, and the use of Roman weapons.[219]

The rebels besieged king Rhoemetalces II (AD 19–36) in Philippopolis, but the Romans arrived in time to save him.[220] Rhoemetalces III was less lucky and was killed during a rebellion in AD44/5.[221] He was the last Thracian king.

Despite the evident unpopularity of the Roman client kings' regime, Thracians had joined the Roman army while they were still independent. The heavy recruiting requirements of the Roman army are cited as the major reason for a Bessi revolt.[222] In AD48 at the Battle of Pharsalus, Kotys, the Odrysian king sent around 500 cavalry with his son Sadalas to join Pompey's army in Greece. Among Pompey's infantry were members of the Bessi tribe, some of them mercenaries, others conscripted or volunteers. Pompey's camp was 'zealously defended by the Roman cohorts left to guard it, but more fiercely still by the Thracian auxiliaries'[223] but Pompey was defeated by Caesar. Two thousand Thracian, Illyrian, Parthian, and Thessalian cavalry were in the Republican army at Philippi in AD 42.[224] Also fighting in the skirmishes before the battle were 3,000 allied Thracian horse on each side under the command of Thracian princes, brothers who fought each other.[225]

Thracian mercenaries and allies also participated on the losing side in AD 31 at the Battle of Actium, when Octavian defeated Mark Antony.[226] Kotys, King of the Sapaeans, hedged his bets on this battle - he sent one of his sons, Raskos, to the camp of the Caesareans, and the other one, Raskouporis, to the Republicans.[227] King Sadalas of Thrace came to Antony's support, but Dicomes, king of the Getai only promised his support. King Rhoemetalces supported Octavian at this battle.[228]

In AD 46 Emperor Claudius annexed Thrace as the province of Thracia, under a Roman procurator, with Perinthus as its capital.[229] Thrace and Moesia were garrisoned by the First Italic, the Fifth Macedonian, and the Seventh Claudian legions plus numerous auxiliary troops.[230] This, however, did not stop further raids, incursions, and rebellions.

The most significant of these came from the Dacians, direct descendants of the Getai who spoke a language closely related to Thracian.[231] Burebista, the first great Dacian king *(c.*70-44BC), made the Geto-Dacian state powerful enough to worry Rome. In 53BC Burebista, seeking to expand his domain, moved south along the western Pontic coast as far as Apollonia Pontica.[232] Antony used a rumour that the Getai were raiding Macedonia to get control of an army of six legions, plus numerous auxiliaries stationed there. Antony told the senate that this army had been prepared by Caesar to be used first against the Getai, then against the Parthians. It was feared the Getai would make an incursion into Macedonia if the army were withdrawn.[233] Perhaps this explains their savage treatment of this people. In AD 11/12 the Romans displaced about 50,000 Getai to the right bank of the Danube (Ripa Thraciae). This meant that a large number of Geto-Dacian towns in the Wallachian plain were uninhabited after the

reign of Augustus.[234] Incursions of Dacians and Sarmatians into Moesia occurred in AD 69 and 87. Domitian launched two punitive raids into Dacia in AD 87 and 88, the first of which ended in disaster, with the praetorian prefect (Cornelius Fuscus) and the Roman commander (Oppius Sabinus) being killed. The second resulted in a humiliating peace treaty in AD 89 whereby the Romans had to pay tribute and supply engineers to strengthen the Dacian fortifications. The Dacians had lost the final battle at Tapae and agreed to be Roman allies and to allow the Romans to cross their lands to attack the Germans.[235]

The crafty Dacian king Decebalus (AD87-106) was just biding his time, and there followed almost continuous war with the Romans. Trajan gathered an enormous army and invaded in AD 101-2 and again in 105–6. After the first invasion he made Dacia into a client state, while the second ended when Decebalus committed suicide and his capital, Sarmizegetusa, fell to the Romans. Dacia then became a Roman province.[236] Even then a large proportion of the country remained free, and its inhabitants, the free Dacians, became known as the Carpi. They made incursions into the Empire starting in AD 238, with the most important being in 242 and 245. They were such a serious threat that several Roman Emperors were awarded the name *Carpicus* for defeating them. The Carpi took over Roman Dacia when the Romans evacuated the province in AD 271.[237]

Imperial troops raised in the province of Thrace fought throughout the Roman world, from Britain (where up to eight Thracian plus three Dacian units were located), Germany, North Africa, and Syria, to the Crimea, where Lucius Furius Seuthes left his equestrian tombstone.[238] Between twenty-eight and thirty-seven Thracian units served in the Roman army in the first and second centuries AD.[239] After being discharged from the army, many veterans went home. Many of their metal discharge certificates (diplomas) have been found in Thrace. This would have helped to increase the number of Thracian Roman citizens, and from the second century the number of Thracians enrolled in the legions increased, with a concomitant reduction in their numbers in the auxiliary forces. The Thracians and the Germans became the preferred nationalities of the Praetorian Guards.[240] There was even a Roman emperor from Thrace, Maximinus Thrax, who reigned for three critical years, AD 235-8.

The End of the Thracians

Despite this movement of Thracians all over the Roman Empire, the Thracian culture and language survived until at least the third century AD, when barbarians began to ravage Thrace. They finally disappeared during

the massive Slavic migrations of the late sixth to early seventh centuries AD.[241]

Six words in the Romanian language are Dacian and there are a few words in Bulgarian that are thought to be of Thracian origin. Many place names in the former area of Thrace have survived from the Thracian era. The only modern manifestation of the Thracian heritage may be the ‘kuker’ scary animal skin and other costumes (often featuring noisy cow bells) worn on Dionysiac festival days (principally St Tryphon’s day, the day of the lopping of the vines) in parades through some Bulgarian mountain villages.

Chapter 2

Thracian Costume

General Appearance

Classical and Archaic Thracians

Thracian troops were large, powerfully built men, mostly red- or light-haired, with beards and grey or blue eyes.[1] It seems that the large build of Thracians remained a characteristic, as Valerius Flaccus (*Argonautica*) in the first century AD refers to 'the huge Bessi'. This might account for the steady demand for Thracian slaves throughout the second and third centuries in Greece, where they were amongst the most common nationality to be sold. Their men fetched the second highest price (second only to the Macedonians), nearly double the standard price for a slave.[2] Anthropological analysis of Thracian remains, both biological and material, clearly shows that they were a Mediterranean-looking people with a dark complexion common to southern-European ethnic groups past and present. Ancient sources say they had delicate white skin, and a tendency to put on flesh.[3]

The hair was worn long or short and straight, and sometimes dressed in a kind of topknot.[4] A mid-fourth-century BC silver gilt appliqué from Letnitsa shows a noble mounted warrior with a topknot. Most other depictions show straight or curly hair. The silver helmets from Agighiol, Peretu, and elsewhere, and some bronze helmets found in Thrace, are usually pointed; the shape seems designed to accommodate this topknot. Many of these items have been found in Getic lands and the imagery on some of these helmets is of men in short, curly hair – perhaps the topknot was going out of fashion by the fourth century (the date of most of these

finds) amongst the Getai. Some of the Skythian caps on the staircase reliefs at Persepolis have a hole at the back to allow for a pigtail or topknot, while others have a bulge at the back that could be the topknot.[5] The topknot was probably a sign of noble or warrior status, at least among the northern Thracians, who may also have dyed their hair blue.[6] This at least was the custom among the Agathyrsi (a Skythian tribe living next to the Thracians) whom Herodotus (IV.110) says had nearly the same customs as the Thracians.[7] At any rate the custom of wearing topknots persisted until at least AD 100 as some of the Dacians carved in the Adamclisi reliefs can be seen wearing it. This custom perhaps started in the Bronze Age, as Homer says:

> A Thracian captain, Peiros, having first smashed the ankle of Greek Diores with a jagged stone, had despatched him with his spear, whereupon Aetolian Thoas hit him in the chest with a spear, below the nipple, and the bronze point sank into the lung. Thoas came up to him, pulled the heavy weapon from his breast and, drawing his sharp sword, struck him full in the belly. He took Peiros' life but did not get his armour. For Peiros' men, the Thracians with topknots on their heads, surrounded him. They held their long spears steady in their hands and fended Thoas off, big, strong and formidable though he was. Thoas was shaken and withdrew.[8]

From the fourth century on, long or curly hair became more common, especially among the northern tribes. The cheeks were shaved, apart from short side-whiskers. In addition, the Thracian Abantes and Moesians were said to have shaved their foreheads to prevent an enemy grabbing their hair during hand-to-hand combat.[9] This was presumably similar to the hairstyle worn by the woodland Ottawa tribe of the North American Great Lakes region.

Although they probably dressed like the Greeks sooner than their subjects, Thracian nobles differed little in their appearance from the better-dressed portion of their people to begin with. Around 560BC some Dolonci princes walked past Miltiades' door in Athens, 'which caused him to notice them, dressed as they were in outlandish garments, and armed moreover with spears.'[10]

Tattoos

Some Thracians wore tattoos. 'To be tattooed is a sign of birth; to bear no such marks is for the baser sort'.[11] Their women specially favoured it.

Plutarch suggests that the Thracians tattooed their women to punish them for killing Orpheus. The stripes and other designs on the woman's face of the Vratsa greave (dated around 380BC) may represent tattoos. The tattooed faces of Thracian women (and Thracian witches who could enchant the moon out of the sky) were proverbial in Athens in the fifth century.[12] Thracian women on Greek vases are distinguished in this way, but not Thracian men. The women may have adopted this custom as early as the Stone Age – terracotta figurines of the mother goddess dated to the fourth and third millennium BC from different sites in Romania (e.g. Cucuteni, Oltenia, Sultana, and Izvoare) show distinct signs of tattooing – simple dots and lines, the latter covering most of the body in one case.[13]

Cicero thought tattooing a typically Thracian practice that was carried out by Thracian men. In 43BC he tells of Alexander Pheraeus, who, suspecting his wife, searched her room and 'ordered a barbarian with a drawn sword, even one punctured with Thracian signs' to precede him.[14] Strabo also thought that Thracian men were tattooed. In AD 25 he says: 'The Japodes, a mixed Celtic and Illyrian tribe, … reach in one direction to the Pannonii and the Danube, and in another to the Adriatic. They are a warlike people and … their bodies are punctured like those of the Thracian and Illyrian people.'[15] There is only one known representation of a tattooed Thracian man - a male face on the knee covering of one of the Agighiol greaves.[16]

Tattooing was also a sign of birth.[17] Noble Thracian women showed off their status by wearing richer and more brightly coloured designs, some of which are shown on the Vratsa greave.[18] They were tattooed on their faces and with spots on their arms.[19] Although there are no known depictions of tattooed Thracian warriors, the noblemen may have done this too, for the Agathyrsi are said to have tattooed both their faces and their limbs with distinctive tribal marks.[20] The sorts of tattoos worn were probably similar to the spirals and animal motifs worn by Skythian chiefs, or sun and moon symbols, as sun worship was a prominent Thracian religion.[21] The Getai, being under heavy Skythian influence, are especially likely to have followed this practice. On the Detroit, Agighiol, and Peretu helmets a central vertical strip between the two eyes, which may represent tattooing, adorns the forehead band.[22] Valerius Flaccus, in the *Argonautica*,[23] says that the Thracian women, who are taken as slaves to Lemnos, had 'stained hands and a branded face' and had 'strange garments and necklaces, the marks of their land'.[24] He also refers to the Thracian women as 'tattooed brides'.[25]

Cloaks and tunics

Until the middle of the fourth century (and probably later in more remote areas), the Thracians wore a tunic, cloak (*zeira*), cap (*alopekis*) and boots (*embades*).[26] Thracian warriors with this dress are common in sixth- to fifth-century Greek art, and still described by Xenophon in the early fourth.[27] It was still in use in middle of the fourth century, as the Thracian warrior goddess Bendis wears the costume on an Athenian relief of about 350BC (and another from Piraeus from 329/8BC[28]) – though its not unusual for a goddess to wear stereotypical anachronistic clothing – and newer styles had already begun to supplant it (at least amongst the aristocracy).[29] None of the people painted on the walls of the *c*.350 Alexandrovo tomb wear this costume. The exact colours of earlier Thracian costume, although described as brightly coloured, are unknown. The tomb paintings use rather dull colours, and are not much help prior to 350BC.

Thracian clothing was made of hemp, flax or wool and was well regarded for its fine quality and texture.[30] Outer garments were sewn, naturally or artificially dyed, with woven or embroidered decoration. The way in which the clothes were worn depended on the season and on the type of work practised, with certain regional differences.[31] The northern Thracians wore clothing similar to the Skythians: narrow trousers and a short long-sleeved shirt tucked into them, combined with an outer tunic, tied at the waist.[32] They also wore pointed shoes, and a jacket with coloured edges.[33] On the staircase reliefs at Persepolis, the Skudrian capes bear weighted tassels at the bottom corners, and are worn over a long beltless coat; their trousers are tucked into half boots. Over this clothing, cloaks, fur coats and the characteristic Thracian *zeira* were used. These were decorated with fibulae, leather or textile belts, and various other articles of adornment.[34]

There are lots of vase-paintings of the Thracian tunic and cloak. The Thracian tunic was knee-length and sleeveless. It was tied at the waist, and belt buckles with wolf motifs were common.[35] The tunic was frequently patterned like the cloak, but sometimes was unmarked or patterned at the hem only.

The cloak (*zeira*) was worn over the top of the tunic and was the most striking article of Thracian dress. The peltasts and cavalry wore it, but probably not the lighter infantry.

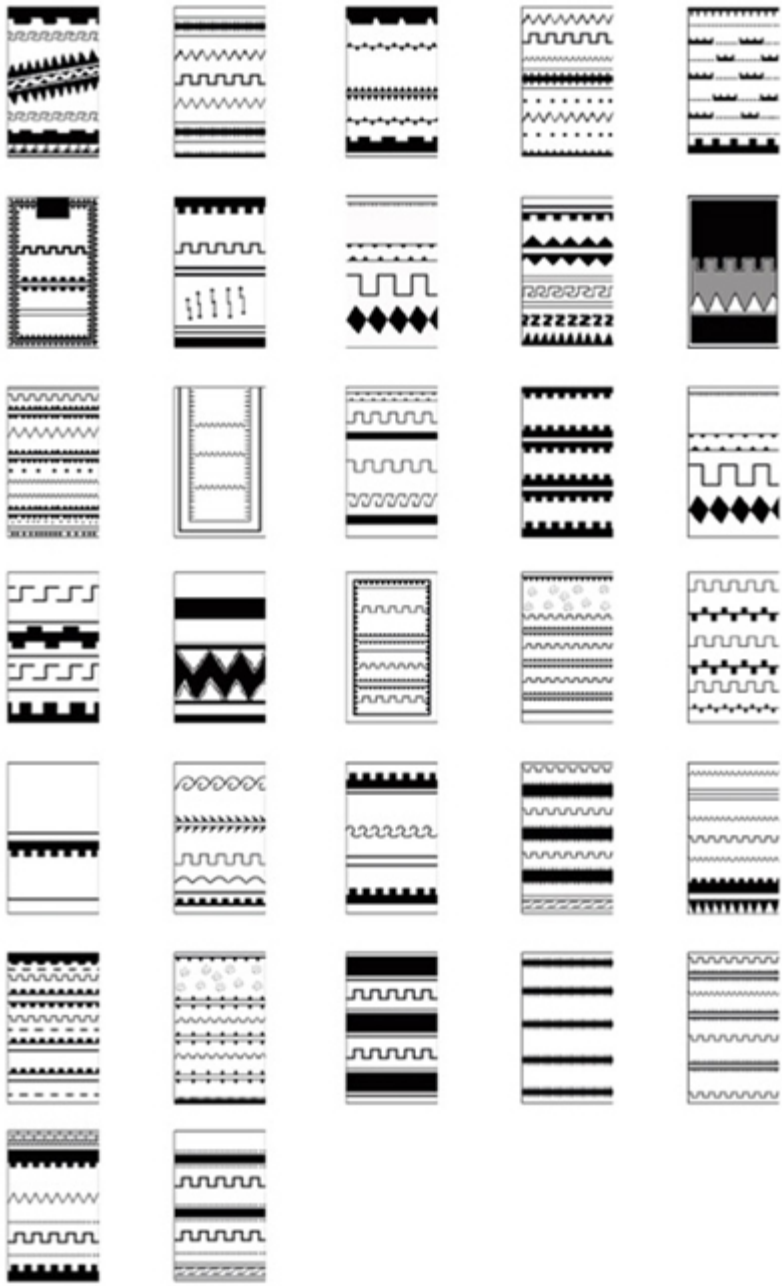


Fig. 1. Thracian cloak designs from Greek pottery, 6th–4th centuries BC.

There may have been a summer and a winter (or a highland and a lowland) coat, as it is sometimes shown reaching from the neck to the feet, while in other vase-paintings it reaches only to the thighs. The shorter coat was only wrapped around the neck, or draped over one shoulder. This (summer) coat may have been thinner and lighter as mention is made of its 'Thracian texture' that could be 'held up to the light'.[36]

The coat that reached to the feet was wrapped right around the body to cross over at the front. It seems to have been of heavy material, since the paintings show it as stiff and not hanging in folds. This would suit the mountain tribes, who had to deal with very cold winters and cool nights during the summer. Cavalry are most often shown wearing the longer coat, which may have been an intermediate length, as at the back it hangs lower than the horse's belly but at the front it is only draped over the shoulders. There is one painting of a Thessalian horseman (cup by Postoxenos, C.500BC, in the Louvre) who had the coat draped right around him while he sits on the horse. The Skudrians from the Apadana staircase could be wearing the long version of the cloak, which in their case reaches to just below the knee.

The top portion could be folded over as a sort of collar, or the top corners could be turned in to hang over the chest or thrown back over the shoulders. It was held on by a single fibula or brooch at the left shoulder, and was often worn like a himation.

The cloak was boldly patterned with lozenges, zigzag and castellated lines, and other geometric motifs.[37] Like the clothes worn by Balkan people until recently, the patterns probably indicated the owner's tribe and region of origin, and groups of warriors from the same area probably wore similar patterns (though this is hard to establish as few Greek vases show groups of Thracians).[38] The total effect was quite impressive - Plato says he thought the Thracian contingent marching in an Athenian religious festival put on a better show than the citizens (they must have looked really good, as this is saying that barbarians are better than citizens, even in a small way).[39]







Figs. 2–4. Thracians in traditional cloaks, caps and boots, from Attic red-figure vases, 475–425BC

Hats

Art shows a wide variety of Thracian caps, in three main styles. The distinctively Thracian *alopekis* cap was made from fox skin (*alopekis* means fox skin in Greek). It came in two styles, one pointed and one lower, with a rounded crown. Both had a flap for the neck and one or more on each cheek, occasionally shown tied beneath the chin. On the pointed cap, the fox's face perched above the wearer's forehead, with neck- and cheek-flaps of patterned cloth. The lower style shows the same neck- and cheek-flaps attached to a low-crowned cap of cloth or felt, or sometimes perhaps dappled cowhide. The third style is a simple high-crowned 'Phrygian' cap, again with neck and cheek-flaps that left the ears exposed, all apparently made in one piece.[40] The flaps could be tied up around the back of the hat, or let down in colder weather.

In some (northern) tribes, the wearing of headgear may have been confined to the nobles. The nobles were called *zibythides* (cap-wearers) in the Thracian language, because they alone had the right to wear the felt cap (*pileus*). The Dacians had a similar custom – the nobles were called *pileati*, and the commoners *comati*.[41] The common people of these tribes generally went bareheaded. On the staircase reliefs at Persepolis, the Skudrians wear a Skythian style hat, with tapering cheek-flaps tied under the neck.

On the *dromos* paintings of the Kazanluk tomb, two warriors, one on foot, and one mounted, wear strange yellow, circular, flat-topped hats. They are painted in the ochre used for bronze, so they could be some type of helmet, but the shape is so unusual and (as a helmet) non-functional that it is unlikely. These may be from an unknown Thracian tribe, but it is more likely that they are (Macedonian) nobles wearing variants of their distinctive leather cap, the *kausia*.[42] This cap was made of leather lined with felt.[43]

Chryssoula Saatsoglou-Paliadeli says that

> the diadem was a separate item, worn right around the cap . The Kazanluk tomb shows how the diadem may have been fitted between the bowl and stephane [forehead band] of the kausia … It has a similar large bowl and thicker band over the forehead. The thin wrinkle that divides these two parts may indicate the position of the diadem. The

> suggestion has been made that a Macedonian ruler is depicted here, and that the cap may well be the kausia. Its similarity with the caps from Vergina and Pompeii justify the suggestion.[44]

She also points out that the *kausia* was not worn in battle, and was restricted to kings, their bodyguards or close associates, and elite troops. In battle scenes the person wearing the *kausia* in more peaceful circumstances (e.g. funeral procession or hunting) wears a helmet – this is one indication that the painting on the *dromos* is not of a battle scene.[45]

The second- to first-century *strategoi* stele from Nesebur (ancient Mesembria, on the Black Sea coast) shows seven Greek generals all wearing a similar cap.[46] There are two other similar stele, found at the same location. This would mean that the *kausia* wearers in the Kazanluk painting could be senior Greek (mercenary) or even Thracian officers or generals.

An archaeologist I spoke to at the Kazanluk museum disagrees with anything but a Thracian interpretation. She said there are other Thracian precedents for this cap. She showed me the fourth-century gold ring from Malkata Mogila with a woman and man engraved on it, but I couldn't see the cap and I think she is wrong. The man's head is flat, but this is probably due to it being right on the edge of the ring and the primitive nature of the portraiture.[47] The similar fourth-century ring from the Zlatinitsa tumulus, showing a goddess presenting a wreath to a horseman, also has two flat-headed people - they are bareheaded or at least do not have hats on that have two rings around them (the goddess is always bareheaded in other imagery).[48]

If the flat cap denotes rank rather than nationality, there is a sixth-century precedent. A man wearing a comparable circular cap with a low central peak, which is again very different from those of the men he is leading, leads the Skudrian throne bearers from Persepolis Tomb I at Behistun. He is carrying two javelins, and there are other small differences, which indicate he may have been a native rather than a Persian, despite his carefully coiffured beard and hair. The sculptors at Pasargadae place Greek costume in the world of the east. The Skythians, the Thracians, the Celts, and the trousered Persians belong to a different sartorial group.[49]

In the Aghios Athanaisos tomb paintings in Macedonia can be seen a man dressed in a very similar way to the *kausia* wearers in the Kazanluk tomb paintings.[50] The Aghios Athanaisos tomb is dated sometime between 316–297BC, i.e. to about the same time as the Kazanluk tomb.[51]

Duncan Head says that this figure has a purple-bordered cloak and shoes that are different from those worn by other figures in the painting.[52]

The strapped sandals (*krepides*) he wears are still different from the enclosed leather moccasins worn by the Kazanluk figures. The Kazanluk men are also apparently either not wearing a cloak or wearing a blue cloak. Still the Aghios Athanaisos figure bears a striking resemblance to the Kazanluk man on foot. Both wear a light blue, knee-length, sleeveless tunic and *kausia*. The blue is even a similar hue, though this could be due to aging of the painting or even on the original clothing. The question is, are these Thracian men in Macedonian costume, or Macedonians in Thracian costume, or just Macedonians? The characteristic Macedonian costume featured cap, cloak, and open boots - *kausia*, chlamys, and *krepides*. The *kausia* was only worn by men of rank in Macedonia, something that is emphasised in the Aghios Athanaisos figure by the purple-bordered cloak.[53]

Boots

Thracian boots (*embades*) were another distinctive feature. Both men on foot and horseback wore them. They were made from fawn skin, and (in contrast to Greek and Roman styles) entirely covered the feet and part of the lower leg. The boots were laced up at the front, usually with a number of flaps hanging down from the top. They did not have soles or heels. These boots were ideal for the colder climate of the mountains (with fur on the flaps), or for cavalry use. The flaps at the top provided protection for the horseman's calf and knee and for the horse's side, especially when riding bareback. They may even have provided some protection for the legs against wounds.[54] Turning the fur over the boot also prevented chafing of the rider's bare skin at the top of the boot.

Thracian Costume of the Hellenistic and Roman Eras

A dramatic change in appearance began during the fourth century BC, reflecting Greek and Macedonian influence. The evidence comes from wall paintings in tombs near Alexandrovo (early fourth century BC), Kazanluk (early third century BC), and Sveshtari (early third century BC). These also provide the first colour references. They show that the beards, tattoos, cloaks, boots, hats, and topknots have all disappeared. At this time also, archaeological evidence proves that some Thracians began to wear (usually three) bronze or gold torcs around their necks.[55] Bare feet, sandals, or yellowish or red-brown shoes with turned-up toes replaced the boots. The Thracians who fought in Alexander's army would have been very similar in appearance to the Macedonians and Greeks in the same army.[56]



Fig. 5. 'Cavalryman A' and 'Footman A' painted on the dome of the Alexandrovo Tomb. Note the knobbly weapons.

The Alexandrovo tomb consists of a long corridor (*dromos*) leading to a small rectangular room, the antechamber, and then to the circular domed tomb (tholos). It is all painted. The frescoes on the dome are very naturalistic, full of life, and are the least damaged. The paintings in other areas are often badly spoilt. The warriors visible include seven men on foot and seven horsemen. Those on the dome are arranged symmetrically so that a bent cross can be drawn between the four footmen and the four cavalrymen (each on opposite sides of the dome). The figures on the dome are arranged in trios moving in a clockwise direction, starting with the man on foot with the red and white striped tunic (hereafter referred to as footman 'A'). The trios are ordered footman –horseman – animal and the pattern is repeated except for the last triad, which is structured footman – animal – horseman and is moving anti-clockwise. The last triad is different because it is where the circle begins and ends, and probably represents winter and/or death.



Fig. 6. ‘Cavalryman B’ from the Alexandrovo Tomb, note the outsized straight sword.



Fig. 7. ‘Cavalryman C’ from the Alexandrovo Tomb, equipped with a lance.

The dome paintings present two mounted warriors engaged in a royal boar hunt, and another two riders hunting stags. The horsemen chasing the boar wear trousers and under-shirts with long sleeves under a short sleeveless tunic. The cavaliers hunting stags do not have trousers on, and in one case the shirt has not got long sleeves. The suggestion is that the stag hunting took place in a warmer season (spring) than that of the boars (autumn).[57] Stags lose their antlers in spring but they are fully grown again by autumn. The best time to hung stags is in spring, when they are attracted out of the forest to feed on the flush of grass and shrub growth. It’s likely that the horns on the second stag look so strange and faint because the painting represents a stag that has lost its antlers (in spring) and only the stumps remain. The second-best time is in autumn, during ‘the roar’ or breeding season, when they are distracted by keeping control of their harem.

The two stags and two boars are arranged symmetrically (in a cross) on opposite sides of the dome and face clockwise. If they are going around some sort of sun symbol in the centre of the dome, perhaps they, and the riders chasing them, actually represent the four seasons. Perhaps that is why the ‘summer’ horse is yellow, and one stag is realistically painted while the other looks like a mythical spotted horse with both horns and

antlers. It is next to the naked Zalmoxis figure (a symbol of death, and life after death, i.e. winter). The best time to hunt boar is in the winter, when they stand out against the snowy white background, and during their breeding season in September-October (they breed all year but are more active at that time, wandering around looking for sows). The modern Bulgarian boar hunting season is from 1 October to 31 December, while in the Czech Republic it lasts from August to January. In Greek imagery, the boar represented death and darkness due to its black colour and nocturnal habits, and was often used to represent the battle between darkness and light

The four horsemen on the dome will here be named in the same clockwise order mentioned above: A – man on grey horse with white and red striped tunic chasing a stag; B– man on yellow horse with white tunic dyed with thin parallel red or black lines attacking a boar; C– man in red tunic on white horse spearing a stag; and D – man on brown horse with grey tunic decorated with a few vertical red lines confronting a boar.[58] The last sits on a leopard skin. They are all clean-shaven, three with short hair and one with long hair.

In photographs of 'B' his red legs (they are the same colour as the hands and face) appear bare except for sharply pointed black shoes. However, there are some black spots on the legs and the painting in that part is spoilt - Kitov[59] (who has of course seen the actual paintings) says he wears long red trousers, like the other boar hunter. He has an oversized grey sword sheath, hanging obliquely from his belt, terminating in a big flattened shiny ball. He has short, curly hair.

As mentioned above, 'B' wears a white, short-sleeved, short tunic decorated with a few thin vertical orange lines. There is another blue or black garment beneath, with long sleeves and white ellipsoid ornaments. 'D' wears similar clothing, although he has red long sleeves, and long, bright red trousers highlighted with white ellipsoid figures. They fit his legs tightly and resemble modern ski pants.[60]

This is remarkable, because Alexandrovo is in southeast Bulgaria, and (in Thrace) previously this sort of costume had only been seen hundreds of kilometres away to the north, in Triballi and Getic lands. The mid-fourth-century horsemen on the Letnitsa gilt sliver appliqué, and Agighiol helmet and greave, also wear close-fitting leggings and long sleeves. These can be seen again on a Triballi horseman depicted on a gilt silver jug from Rogozen (No. 159) from about the same time. He has the same sort of clothing on his arms and legs but unlike the Alexandrovo figures is wearing a cloak. This figure's combination of long sleeves showing under the short-

sleeved tunic reappeared in Dacian dress centuries later, so perhaps this style did not go out of fashion with the Getai.

The long-sleeved, long-trousered costume looks Persian or Skythian, and the dress of Persian leaders may have inspired it. Interestingly, though, it may have been acquired from the Macedonians, or the Macedonians may have acquired it from the Thracians (along with the wedge cavalry fighting formation). On both the Alexander Mosaic and Sarcophagus (including the Hunt Frieze from Philip II's tomb and several other visual sources) long-sleeved tunics are shown being worn by Philip, Alexander and aristocratic cavalrymen – this is also repeated on bronze and terracotta figures.[61]

The men of the poorest station depicted on the ceiling at Alexandrovo and Sveshtari wear the short tunic of the workman, the *exomis*, a small length of cloth in a dull colour (usually red-brown) which was either pinned on the left shoulder, thus leaving the right arm entirely free, or else wrapped around the waist like a loin cloth. One footman at Alexandrovo (next to 'B') wears such a red-brown sleeveless tunic, hanging from his left shoulder with his right arm and chest uncovered. He carries a curved knife, and has a beard with sideburns. He is the only man with a beard painted anywhere in the Alexandrovo tomb. The third man on foot around the dome, next to 'C', wears a grey *exomis* that looks as though it may be sheepskin. An infrared photograph[62] reveals two yellowish-white vertical stripes down the side, so he is actually wearing cloth dyed in a comparable way to the horsemen and footman 'A'.

In Greece a man engaged in strenuous but 'honourable' activity, like fighting or hunting, wore different clothes: a short chiton, and a smaller cloak, the chlamys, fastened with a pin or a brooch. Greek soldiers are dressed like this when they are not wearing their armour, and so are huntsmen and sometimes travellers.[63] The horseman drawn on the Sveshtari tomb (a Getic king) wears an unmarked short chiton and chlamys, but the colour cannot be determined. His legs are bare save for shoes of the same type worn at Kazanluk, and he has plain long sleeves.

The chiton consisted of a long, loose, pleated tunic worn next to the skin. It was not much more than a tube of woven material of either linen or wool, with armholes but sometimes with tight-fitting short sleeves. It could be pinned together over the shoulders, or tied, or, if it was to be worn under armour, sewn. For men and boys it reached just above the knees and was either its natural light colour or bleached white. It was hitched up with a simple girdle of leather or cord around the waist. No underclothing was worn – if the person concerned was cold in the winter, he or she might wear a short chiton underneath.[64]

Although people in the other tomb paintings commonly wear a chiton, only two men on the ceiling of the Alexandrovo tomb wear it alone. There is one on foot, (footman 'A', armed with a curved knobbed wooden club), and one mounted – cavalryman 'C'. Footman 'A' wears a short-sleeved brown tunic with two thick vertical white lines down each side and one white stripe on each sleeve (the reverse of the horseman next to him). Cavalryman 'C' wears only a simple brown chiton, a straight sword, and shoes. Three riders from the dome of the tomb wear a chiton as a sort of overgarment, with the aforementioned Persian-like garments underneath.



Fig. 8. Reoconstruction of a detail from the Sveshtari Tomb, early 3rd c. BC

It seems that vertically striped tunics became all the rage during the fourth century in this general part of the world. The vertically striped chiton is also worn by many of the other people visible on other parts of the tomb. Likewise a figure on the Alexander Sarcophagus (often identified as a servant) wears a tunic with two thin vertical stripes – and a number of servants (and/or grooms?) appear to the left of the soldier symposium tomb painting from Aghios Athanaisos (near Thessaloniki) wearing similar tunics.[65] Two other horsemen are painted on the walls of other parts of the tomb (in mythical combats with men on foot) and although their frescoes are substantially damaged you can see that they are wearing simple white chitons. One, painted above the entrance to the tholos, has his chiton tied with a red girdle. His opponent, a man on foot holding a shield outstretched in front of him, wears a white chiton with a single red band along one side edge.[66] Another man on foot painted on a wall of the antechamber to the tomb wears a Thracian helmet and red chiton with white vertical stripes, very like footman 'A', except that he is also holding a rimmed blue

shield.[67]

The dress of the two footmen in the Sveshtari tomb drawing is hard to see as the lines are faint and, in the case of the second man, the whole image is badly smudged. The men, probably arms bearers, walk behind a horsemen, in what may be a victory celebration (the horseman is receiving a laurel wreath or crown from a lady identified as his wife or the Thracian mother goddess).[68] The men are thought to be returning from battle. Victory may have eluded the tomb's owner, since the tomb is unfinished, as though he died suddenly and unexpectedly in battle. The first man, wearing a wide-brimmed, pointed hat – most probably a *petasos* – or helmet (resembling the helmets worn by sixteenth-century-AD Spaniards), and a long *exomis* that is draped over his left shoulder. The *exomis* reaches below his knees but his right arm and right chest are bare. He may have a beard with sideburns. He carries a long spear over his left shoulder, while the right hand holds a large sword sheath from which dangles the shoulder strap. The second man, dressed in a knee-length garment, holds a large-rimmed shield in his right hand (probably an *aspis*).[69] The shield has some sort of design, possibly a star, painted on it. Both have bare feet. The second man's head and upper body are not visible as that part of the drawing is too badly damaged.

There is a lot of resemblance between the Alexandrovo, Sveshtari, and the Kazanluk figures: the pose of the horses, fancy saddlecloths, clean-shaven faces, and the low shoes. The tunic of footman 'A' is almost identical in colour and decoration to that of a Kazanluk servant. That man wears a light yellow-brown tunic with one white stripe down each side. Most tunics at Kazanluk are simple, single-colour garments, either with patterned borders, or free of any decoration. Some are short-sleeved, and others are sleeveless. In the latter case it was probably fastened at the shoulder with pins, as it is occasionally shown leaving the right shoulder and chest bare. The colours of the cloaks and tunics at Kazanluk include red, white, red-brown, pale blue, pale green, cream, light blue, and off-white. Few of the infantry at Kazanluk, and none of the figures at Alexandrovo wear cloaks.[70]

Since the Alexandrovo paintings are early fourth century, they help to answer the question of what Alexander's Thracians may have looked like – his armies are located chronologically in between Kazanluk (and Sveshtari) and Alexandrovo. It looks like the Hellenization of the Thracians began much earlier than previously thought, and had a longer time to percolate down to the lower levels of society. This Hellenization would have

gathered pace with Alexander's successes but was diluted by the arrival of the Celts in 275BC.

When the Athenians gave up wearing the long chiton, the usual outer garment for men at leisure was a large woollen cloak, the himation, worn over a short chiton or by itself. This cloak had to be draped in strictly conventional ways. It had to be draped from the right round onto the left arm or shoulder, thus leaving the right arm free.[71] On top of the chiton went the himation, a woollen garment that was merely draped on the body, round the waist, over a shoulder, under the opposite arm and then back over the same shoulder. The men in the Stele of the Strategoi from Nesebur are dressed this way. It was recognized as a sign of elegance and good breeding to have your himation arranged properly: too short and your neighbours sniggered; too long and it dragged in the dirt.[72] The Thracians didn't care from which shoulder it was hung, which the Athenians thought particularly uncouth. Poseidon says scornfully to Triballos (the Triballian god) in Aristophanes' *Birds:*

> Hi! What are you up to? You are throwing your cloak over the left shoulder. Come, fling it quick over the right! And why, pray, does it draggle in this fashion? Have you ulcers to hide like Lespodias? Oh! Democracy! Whither, oh! Whither are you leading us? Is it possible that the gods have chosen such an envoy? You are undisturbed? Ugh! You cursed savage! You are by far the most barbarous of all the gods.[73]

From the third to the first centuries BC Thrace was ravaged by invasions by the Macedonians, Celts, and Romans. This had a dramatic effect on Thracian culture, and is reflected in their dress. The people carved in stone or in metal often do not look Greek or Roman. Even after the overthrow of the Celts in 216BC, they look like Celts or Thracians in Celtic costume. Examples include the second- to firstcentury Yakimovo treasure from Montana district. The Yakimovo treasure includes two silver-gilt bowls that have in one a bust of a bearded man, and on the other the figure of a flat-headed man riding a stallion.[74] Another example, one of the second-to first-century *phalerae* from Galiche, near Oryahovo (in north-western Bulgaria)[75] depict a rider in loose trousers, a large cloak that covers his entire body to his knees (and a good part of the horse), and several torcs around his neck, placed one above the other.[76]

The metalwork depictions of Thracians wearing torcs all come from northern Bulgaria or Romania, while the rider from Abdera doesn't wear a torc – so it would be easy to suggest that the change in dress only occurred

in the northern part of Thrace, and was part of the transition to the Dacian culture. This is not the case, as Thracian graves of men with torcs have been found in southern Bulgaria.

Amongst the Celts, the torc was the mark of a free man, and was worn by their leaders. A clue as to the appearance of later Thracian aristocrats is given by Antiochos II (261–246) at the siege of Kypsela. Antiochos decorated them 'with golden chains and silver-studded arms' and provided them with 'very beautiful clothes.'[77] Many silver bracelets with snake heads on the end have been found at the Yakimovo site. Similarly in 168BC Perseus presented his 20,000 Getic mercenaries with 'military cloaks, gold necklaces, and horses for the officers, and 10,000 staters'.[78] The 'gold necklaces' is perhaps a reference to torcs. Valerius Flaccus when writing about the Thracians not long afterwards refers to necklaces as a 'mark of their land'.[79]

This switch to a Celtic style was by no means universal, and a great variety of dress continued to be worn. Depictions of the Thracian hero from the fourth century onwards, such as the appliqués from the Lukovit treasure, usually show him dressed in Greek or Roman style with bare arms, feet, and legs, but wearing a cloak. During Roman times the appearance of the Thracian hero changed only slightly, with the acquisition of boots and long hair. Some also wore trousers. They had curly hair, and a tunic or cloak held on by a single circular brooch on the left shoulder.[80] The tunic is in some cases folded and pleated many times vertically and tucked in around the waist. The folds almost concealed a belt that was worn together with a baldric. In this case, the length of the tunic was adjusted by pulling it up through the belt.[81] This is visible in the marble relief of a Thracian cavalryman from Abdera, dating to the second or first century BC, which portrays a man wearing a long cloak and a many-folded tunic. He has long trousers and a long, straight sword. He also wears shoes.[82]

According to Plutarch, the Thracians at the Battle of Pydna (168BC) wore black tunics:[83]

> First marched the Thracians, who he [Nasica] himself tells us, inspired him with the most terror; they were of great stature, with bright and glittering shields and black frocks under them, their legs armed with greaves, and they brandished as they moved straight and heavily ironed spears *[rumpia]* over their right shoulders.[84]

Some authors take this to mean that they were regular troops. These Thracians were part of Perseus' army and at the same battle Perseus'

personal guard, the Agema, were uniformly dressed in newly made crimson.[85] This is the only known instance of Thracian troops wearing the same colour. Perhaps it was black because that would be best for one of their preferred tactics, the night attack. It may be for an extraordinary reason, such as their being regularly paid and equipped. The behaviour of the troops (e.g. starting the battle without orders to do so) does not indicate the disciplined behaviour expected of regular troops. Black is one of the three colours prominent in Thracian tombs (the others being red and white, usually painted in three bands red-black-white top to bottom), so its sacred nature would explain the colour for Thracians without regular training and equipment being necessary. There is also a lot of warrior symbolism associated with this colour.[86]

North of the Danube, despite the extension of Roman power and influence in Thrace and Moesia in the first century AD, Dacian dress remained quite distinctive. It is used to separate them from the Germanic tribes and the Bastarnae on Trajan's Column and the Adamclisi monument. The Dacians wore a cap, a short-sleeved tunic, a long coat secured over the right shoulder with a brooch that sometimes covered the left arm, and shoes. Some also wore trousers. They had beards with sideburns and medium-length hair. Metope XXI from the Adamclisi trophy shows them wearing a rather different costume.[87] This consisted of a cloak, long sleeves, and long trousers, all with many folds, which in the case of the trousers almost form a spiral around the legs. Only their caps, long beards, and *falces* are the same -perhaps, as their caps are slightly different, these are lower-class Dacians. The reader who would like to see for himself or herself the Dacian costumes should go to three locations: Adamclisi in southeast Romania to see the victory monument and museum; Rome to see Trajan's Column and the Arch of Constantine; and Benevento to see Trajan's Arch. Some panels from the Italian monuments are in the British Museum, while the scenes from Trajan's Column are best viewed (at eye level, as plaster casts) in Bucharest, in the National History Museum.

Thracian attire thus went through several changes reflecting the many invasions of their country, but they still managed to retain a unique and distinctive element to the end. The next chapter will show how the same process followed in arms and equipment.



Figs. 9–10. Dacians, some armed with the falx, battle Romans on the Adamclissi monument.

Chapter 3

Armour

The scarcity of armoured troops in Thracian armies was one of their most characteristic features and it defined their tactics. Armour was initially restricted to the noble cavalry, but in the fourth century BC many troops began wearing helmets, and peltasts started wearing greaves. After that time they also used larger, stronger shields. There was a marked difference between northern and southern Thrace, with the northern Thracians wearing Skythian-style panoplies, and the southern Thracians wearing Greek equipment (with Thracian alterations). Assuming burials reflected actual practice, Thracian warriors commonly used armour that was older than the rest of their equipment, or a mixture of armour and weapons from different styles (usually Thracian and Greek) and periods.[1] During the classical period, they usually wore only one or two pieces of armour, not complete panoply.[2] Some types of armour persisted long after they ceased to be used elsewhere. Analysis of some armour and helmets found in Bulgaria has shown that they were used by a couple of generations before being put in the grave.[3]

Some of the last independent Thracian soldiers, troops of the Thracian clientkingdom, were equipped 'in the Roman style'.[4] That may have meant they wore Roman mail shirts and helmets, and carried Roman shields. They continued to use these when they became Thracian auxiliaries in Roman service.[5] A Thracian tombstone dated AD 49 from Colchester shows a cavalry officer wearing the scale-armoured cuirass (*lorica squamata*), a Coolus helmet, and carrying an oval shield.[6] Dacian armies were mainly unarmoured, although they used large, stout shields and their nobles were fully armoured in mail shirts and helmets. In this chapter we shall discuss

helmets, body armour, shields, greaves, and the differences between north and south Thracian panoplies. We shall also discuss issues such as the extent to which infantry wore armour, the changes that occurred over time, and Thracian innovations.

Helmets

It can be safely assumed that high-status Archaic Thracian warriors wore boars' tusk helmets like their Mycenaean counterparts. The boar had great significance to Thracian warriors, and it appears many times in Thracian art. There may have been a Thracian variation on the Mycenaean theme – the wearing of boars' tusk helmets and boars' tusk pectorals, of which only the latter have been found in Thrace.[7]

From the late Bronze Age, the most important Thracian helmet styles were Chalkidian, Corinthian, Thracian, Attic, and Skythian (or Northern).[8] The Illyrian type was also used in the sixth century BC.[9] Helmet styles continued in use in Thrace after they had gone out of fashion elsewhere and it took some time before newer versions were taken up by Thracian troops. Helmet designs changed to reflect developments in metallurgy, changes in fashion, and tactical developments. They were originally meant for use by Greek hoplites but were modified for use by cavalry and also to allow for the more sophisticated and fluid warfare of the fourth and third centuries BC. This required helmets that allowed orders to be heard and which did not hinder movement. Cavalry use required good all-round vision and hearing, as well as ease of movement. This is why we see in Thracian use a change from the Corinthian helmet to other styles that mimicked indigenous headgear. Within those styles, we see the eyes and ears being uncovered and hinged/ articulated cheek-pieces being introduced. Many Thracian Chalkidian helmets have broken nose guards; it is thought that cavalrymen did this deliberately to make the helmets fit better and therefore more comfortably.

A lot of helmets found in Thrace show signs of repeated wear and tear, with riveted inserts and tenons.[10] A Chalkidian helmet from Golyamo Shivachevo was originally made by being cast, then hammered and polished from the outside. Some time later it was dented during battle but these deformations were hammered out again. Initially it had hinged cheek-pieces; however after repeated use the hinges on both sides broke, were reattached with wire, and may have been soldered back together again. This helmet has a height of 24cm, maximum diameter 22.5cm, and 15cm cross width. It has traces of solder on the top, indicating it originally had a front-

to-back crest.[11]

Helmets were lined in felt or leather, or worn over caps, as the remains of a felt cap have been found inside a Thracian helmet from Pletena, and leather remains inside other helmets.[12] The Chalkidian helmet found in the Zlatinitsa tumulus had a purple-coloured leather hat inside it.[13]

Numerous examples of Thracian helmets, greaves, and armour are silver- or gold-plated. This was not just for decoration and prestige – it helped protect the expensive armour from corrosion – some helmets (e.g. the 'griffin' helmet) are silvered on the inside.[14]

The Chalkidian helmet was the most common found in central and southern Thrace.[15] More than sixty have been found there. They have various differences related to location and historical period, and have been classified as two models divided into six sub-types.[16] Related to the Corinthian helmet, the Chalkidian helmet was an old style originating in the sixth century BC. Essentially it was a Corinthian with smaller, rounded cheek guards and holes for the ears, but some versions had square cheek guards. Providing slightly better vision and superior hearing, the Chalkidian helmet grew in popularity as the Corinthian declined.[17]

In Thrace before 350BC the most frequently used form was the simple version, with engraved, stylized eyebrows. This has a slight ridge separating the skull and sides, the neck guard recessed inwards; a curved opening for the ears; deep, rounded cheek-pieces hammered out from the sides, and a short nosepiece. An advanced late-fifth-century version from Rouets has a relatively high crown, longer, sickle-shaped cheek-pieces, and long, pronounced eyebrows meeting in a curved 'V'-shape across the front. Two bands of engraved ornament separate the skull from the sides.[18] Another late-fifth-century example of unknown provenance is decorated with griffins on both sides of the crown, and palmettos on the eyebrows. It may have had iron cheek-pieces but it is badly damaged and these have disappeared.[19] A similar helmet is worn by the female figure (variously identified as Athena or an Amazon) on Rhyton VIII from the Panagyurishte treasure. There is a griffin on each side of the crown, with wings that spread over most of its surface. Between the griffin's beak and paws there is a floral ornament.[20]

By the middle of the fourth century BC, there was a Thracian tradition of using, repairing, and producing variations of the Chalkidian helmet, and a new version came into use. The new type had two variants, with fixed or hinged cheek-pieces.[21] One fabulous example of this later type is all bronze except for hinged iron cheek-pieces. It looks like a Hollywood barbarian's helmet, as it has tall bronze horns and fittings for a central Greek-style

horsehair crest. It was found in a fourth-century grave at Bryastovets near the Black Sea.[22] The later-style Chalkidian helmet is similar to the Attic helmet, and prior to 1980 was referred to in Bulgarian literature as the Attic type.[23] This is not surprising as the Attic helmet was descended from the Chalkidian. Essentially it was a Chalkidian helmet without a nasal bar, the only part left from the original feature being the inverted 'V' on the forehead of the Attic. It was frequently ornately decorated and equipped with hinged cheek guards.

The style of Chalkidian helmet with fixed cheek-pieces has a neck guard shaped to fit the back of the neck, which extends towards the shoulders, while the broad vertical cheek-pieces curve up at the back and over the ears. The brows are lightly profiled and there is a vestigial nosepiece. The crown is raked back sharply from the sides. On helmets with hinged cheek-pieces, there is a high, well-rounded crown from front to back. A gentle curve separates the skull from the straight neck guard, shaped at the lower edge, and the tongue-shaped cheek-pieces are longer. These more complicated helmets are likely to have belonged to the noble cavalry and Thracian commanding officers, who also wore elaborate Greek parade helmets, including a sheet gold composite version found at Panagyurishte.[24] A mid-fourth-century bronze Attic (or modified Chalkidian) helmet from the Peychova Mound in the Starosel complex had a silvered band on the forehead, cheek-pieces and nose guard.[25]

The five sub-types of Chalkidian helmets were:

- II-A, Orthodox, closest to the Greek prototype
- II-A-2 Without embossed eyebrows
- II-B With vestigial nose guard
- II-C (Yudenlnik) – With elongated cheekpieces and nape piece
- II-D With reduced proportions of the cheekpiece and the nape piece.[26]

Apart from the larger number found in northeastern Bulgaria, these helmet types have been fairly randomly distributed throughout the Thracian lands.[27] Despite the large number found, nearly all the helmets are from monumental tombs or rich graves (often including horse trappings, horse burials, or other horse decorations), so it is assumed that cavalrymen used them.[28] Not all were used by cavalry, though, as infantry wear them on tomb paintings, and some helmets have been found with infantry weapons or armour. The most likely place where the helmets were originally manufactured was in Thasos and nearby mainland towns, though there is

also some evidence for their manufacture in Mesambria Pontica.[29] An interesting general observation is that Thracian helmets are usually found well away from the Greek cities of the coast, while the same helmets are only found in, or on the borders of, Greek *poleis* in other parts of the Black Sea littoral. Apart from differing burial practices, an explanation for this could be that the Thracians had more peaceful relations with the Greek towns on their coast.[30]

After the Macedonian conquest, many of the helmets mimicked the Thracian caps, so that these helmets are known as Phrygian (or Thracian) helmets. The 'Thracian' helmet appeared in Greece in the middle of the fifth century BC, but strangely enough, although more of this type has been found in Thrace than anywhere else, it is rarely found in Thracian burials before the Hellenistic era.[31] It was distinguished by a peak to shade and protect the eyes, a short neck guard, and long cheek-pieces shaped to fit the face, pointed at the chin. It was sometimes decorated with a stylized beard and moustache in relief. In that case it completely covered the face, but normally it featured an open face and gave good visibility and hearing without sacrificing protection. The large bowl was a good defence against sword strikes. Over time the metal crest on top of the helmet became longer, more decorative and bent further forwards, like the Phrygian helmet. Horsehair crests were worn but Italian-style limp plumes were also used.[32]

The skull shape varied enormously; it was low and rounded, sometimes conical, but the most spectacular and distinctive was the Phrygian type with a high, forward-sweeping metal ridge, very similar to the shape of the Phrygian cap. They were made mostly from bronze (often in a single piece), but some included iron. A Phrygian-style helmet found at Pletena, in the Rhodope mountains (with a *rhomphaia*) was made with a sheet of bronze to cover the lower face, moulded to imitate beard, sideburns, and a moustache. The top part of the helmet was made of iron sheets joined together with the aid of iron bands and rivets.[33] Many hybrids and variants also occur; one Thraco-Boeotian model, from Moldavia, has the skull of the former and the down-swept brim of the latter.[34]

Such helmets were often crested and sometimes had extra crests or feathers as side-ornaments. Fittings for feathers on such helmets probably indicated officer status, as they did in the Macedonian army.[35] Another early fourth-century Thracian example from Pletena is also extensively decorated with circular silver appliqués, bands above the eyebrows, a silver band on the nosepiece, and a silver band around the crest.[36] In some Macedonian tomb paintings these helmets are painted blue or yellow,

suggesting that some were enamelled, but helmets decorated this way have not been found in Thracian tombs.

In the Kazanluk tomb paintings, the Thracian helmet is commonest. One figure is bareheaded and long-haired, like another figure at Alexandrovo. Other infantrymen in the Kazanluk paintings wear a bronze Attic or Chalkidian helmet, most with a pale blue crest.[37] The men depicted in the Alexandrovo tomb paintings are bareheaded, with only one exception. The hoplite in the striped tunic (from the anteroom paintings) wears a gold-coloured Thracian helmet.

By contrast, warriors on north Thracian (Getic or Triballi) metalwork are bareheaded. This includes the men outlined in the Sveshtari drawing except for one man, as mentioned above, who probably wears a *petasos* (broad-brimmed hat) but might be wearing a similarly shaped helmet instead. Here there is a very interesting exception – a warrior portrayed on the side of the gold helmet from Cotofenesti.[38] He wears the Skythian-style helmet, which had the form of a cap, with scales covering the skull and iron strips on the ear-flaps and neck guard. This was probably the most popular north Thracian style.[39] More famous though, are five conical gold and silver parade helmets from different sites in Romania.[40] These have eyes and eyebrows embossed and gilded on the forehead, and embossed and gilded animals and people around the sides.

In addition, the Cotofenesti helmet was moulded with multiple bumps on its flat top, while the others have high peaks. The bumps are thought to represent the hairstyle of the wearer, while the peaks may have allowed space for the wearer's topknot.[41] They have rectangular cheekpieces, a short neck guard, and cut-outs for the ears and face. It is possible that less ornate items of the same general pattern may have been worn in action. The silver helmets have been shown to come from the same workshop.[42] One Illyrian, an Attic, and some Chalkidian helmets have also been found in Getic graves.

Romanian authors believe that the silver and gold Getic helmets resemble the *pileus* worn by the Dacian *tarabostes* and assume the influence of Iranian hats. They say there is definitely a separate Getic style of helmet. Ogenova and Stoyanov suggest that a Chalkidian helmet (like a bronze helmet from Silistra) was the prototype for these helmets.[43] To make the helmet a single sheet of metal was forged. It has the same type of eyebrows and ornamentation as the silver helmets. The greatest concentration of finds of this type of helmet is in northeast Bulgaria, in or next to the Getic region, and not far from Agighiol. These helmets are all

dated to around the middle of the fourth century BC.[44]

Body Armour

Many metal cuirasses from the region have been found but nine in particular, dating from around 500BC to 350BC allow us to follow the development of Thracian body armour closely.[45] There were two unique features of Thracian armour – the iron collars and iron extensions. The first surviving examples of iron plate armour in the Western world come from Thrace. For the style of armour worn in Thrace, there were two traditions, representing northern and southern Thrace. Initially, the armour was made of leather and/or bronze, but iron armour started to appear early in the fourth century BC (or late in the fifth century). The Thracian custom of burying their warriors with their armour has been useful in shedding light on Greek practices, as the Greeks did not do it, and few Greek cuirasses have been found.

Body armour is rare in Thracian graves overall, but relatively common in tombs of the nobility. It is also rare in tombs from coastal Macedonia and Chalkidike, which clearly does not match the real-life situation there.[46] Sometimes if ordinary (undecorated/non-golden) armour is found, it is not reported, reported in an obscure journal, or few details are given, so probably it was a bit more common than indicated by official accounts. Nevertheless it is clear that it was limited to Thracian commanders and nobles, such as Seuthes' heavy cavalry bodyguard, until the presumed wider introduction of mail shirts for infantry by the Roman clientkingdom.

At the Battle of Issus (333BC) one translation of Curtius III.9.9 says of the Thracians 'these too were in light armour.'[47] This has been used to suggest that the Thracian infantry wore non-metallic corselets, but the Penguin translation says 'who were also light armed,' which seems more likely. Only one such corselet has survived to the present day, and it was from an equestrian tomb; so far there is scant evidence that Thracian infantry wore body armour. This evidence consists of: (a) the hoplite-heroes painted in the antechamber of the Alexandrovo tomb (they wear the *linothorax*); (b) the Rouets hoplite bronze armour with the mitre attached; and (c) the marble relief of a horseman from Abdera.

The last is of a Thracian cavalryman, dating to the second or first century BC.[48] The man on foot standing immediately behind his horse may be wearing armour (and an Attic or Roman helmet) and carrying two spears. The poor state of preservation makes it hard to be sure, but he definitely has a prominent right shoulder, with the thick overhanging material typical of a man wearing a *linothorax*. This evidence is of limited

value as the association of the carving with a former Greek colony means that this man may not be Thracian.

Descriptions of Homeric Thracians, and archaeological evidence, show that Greek armour was in use in Thrace long before the classical period. Homer describes Thracian warriors at Troy being clad in beautiful armour, so it may be that a king and his bodyguard were fully armoured during the Bronze Age. Rhesos had 'marvellous golden armour, of the rarest workmanship.'[49] His sleeping bodyguard laid their splendid armour on the ground beside them in an orderly three rows. The skill with which the Vulchitrun treasure was fabricated, and its richness, shows that Rhesos and his companions could indeed have been wearing such well-made golden armour. Homer also describes the Thracian captain Peiros wearing armour (see above). Euripides mentions Rhesos' golden armour and adds an interesting detail about the shield:

> Hail, all hail! O mighty prince! Fair the cub you have bred, O Thrace, a ruler in his every look. See his stalwart frame in golden corselet! Hark to the ringing bells that peal so proudly from his shield-handle.[50]

This probably means he had a bronze-faced shield and was banging it with his sword or spear like a bronze bell.

The first type of metallic armour used was the primitive bronze 'bell' type, which was employed in Thrace until the fifth century BC, by which time it was obsolete in Greece. The most interesting example is a fifth-century bronze bell cuirass from Rouets. It has an abdominal plate or mitre still attached by means of silvered nails to the bottom of the breastplate. This attachment is unique in Thrace; indeed it has rarely been found outside Crete. It is unlikely to have been used except for dismounted action as the mitre would have made riding extremely uncomfortable. Possibly it was just a gift or booty and never used in action.[51]

The 'bell' corselet made few allowances for comfort and ease of movement. The armholes were rather sharp, and there was a pronounced waistband with rolled edges projecting outwards at the lower end. The latter helped deflect downward blows away from the groin, and made wearing it a bit more comfortable for cavalry. They were decorated simply, with three engraved lines, or with the chest muscles ending in three-petalled lotuses, fish tails, or engraved marine monsters, and with other anatomical details enhanced by seven- and nine-petalled palmettos. The marine monsters (*ketoi*) had a long, narrow neck, long snout, snapping

jaws, and spiky mane –rather like a Chinese dragon. Except for the earliest Greek versions, Greek examples were worn with *pteryges* attached to an undergarment. Thracian cuirasses have a row of holes along the edges to take a lining, which indicates they were worn without *pteryges*[52] For instance, a bronze breastplate from the fifth-century-BC Eski Saghra tomb (near Stara Zagora) still has an iron rivet attached to the left shoulder, and there are remains of rivets around the edges, while bronze patching survives in the middle. This cuirass has a height of 35.4cm and a width of 28.8cm and is now in the Ashmolean Museum.

A bronze cuirass with golden decorations, manufactured in Greece at the end of the sixth century BC, was found in 2001 at the 'Nenchova Mogila' mound near the village of Chernozem (close to Plovdiv). It has a very deep neck hole, to allow for the insertion of a neck guard or pectoral. An iron neck guard was found with it, and a leather belt from a quiver was preserved on the left shoulder of the armour. Its unique feature is that it is decorated with a 24-carat-gold pectoral and nine other golden conical decorations on the front of the armour. The pectoral is engraved with the head of the Gorgon Medusa and the sacred animals of the Odrysian kings – a lion and a stag. It weighs 132.8g. It is 45cm wide, 37cm high, and 1.5mm thick. The pectoral was made only for the burial and not used while the man was alive. It is believed that the face of a deity protected against evil forces and enemies during antiquity, but the use of gold also emphasized the immortal nature of the priest-king.[53]

The armour belonged to a noble Thracian warrior of the dynasty of Skythodokos. He is thought to have been Kersebleptes' son, and probably died in battle with Philip II during his conquest of Thrace 341–339BC. He was 18–19 years old, had well-developed muscles, and was 173 or 183cm tall, depending on the method used for calculation. He had a horse buried with him that had been wounded by an arrow, but the wound had healed. Two spears and a 'sheaf of shafts' were also buried with him – whether from arrows or javelins is not specified.[54]

A unique bronze and iron cuirass of unknown provenance (it was seized by the Bulgarian Ministry of the Interior from illegal traders) was put on display in 2008 by the National History Museum in Sofia. It is exceptionally well preserved, and both the front and back plates have survived. The chest muscles, outlines of the rib curves and the details of the back are modelled as raised lines in the bronze. Only four other such suits of armour have previously been found in Bulgaria (in Tarnichane, Tatarevo, Svetlen and Rouets). The new armour is reinforced with iron dowel plates from both sides of the shoulder dividing line and above the

curves of the chest area. This Thracian innovation is noted in the armour from Kaloyanovo and the armour found in the 'Svetitsata' (the Saint) tumulus near Shipka. Unlike the other armour, this one has specific pairs of clasps as dowels on both sides of the connecting line as well as on the specific outline. The rust marks made by the iron sections are quite obvious. The armour is also notable for its dimensions, which rank as one of the largest found so far – 50cm high and 46cm wide.[55]

Other, non-metallic armour was in use at the same time. A recently discovered gold sword sheath ornament[56] shows Ares as a cavalryman armoured with a belted *linothorax*, and Thracian or Chalkidian helmet but no greaves or shield. His spear is only slightly longer than he is tall, and has a snake (or a thin rope) wrapped around it, so it is a javelin. At first glance it seems to be a standard depiction of a Greek hoplite, but the purpose of the appliqué, the length of the spear, the Thracian helmet, and the lack of a shield or greaves signify a cavalryman.

A search for Greek images of Ares showed that they rarely have this pose except for those in sculpture, and none of them have a snake associated with them. Those in sculpture (and most others) hold a shield in their left hand. Ares is supposed to be a Thracian god that was adopted by the Greeks, but this is rather different from a Greek Ares. So this is definitely a Thracian Ares, and he probably wears fourth-century BC Thracian gear. The 'snake' doesn't have a head, tail, or markings but it would be odd to get some divine favour for your sword from a rope.

Parts of 'chain-armour' strengthened with metal lamellae and combined with a pectoral trimmed with similar lamellae were found with a Chalkidian helmet and three spear heads in Branchevo, Shoumen district. They are variously dated between the fifth and the third century.[57] Lamellar armour is a type of composite armour consisting of a shirt of laminated layers of leather sewn or glued together, then fitted with iron plates.[58]

A complete mid-fourth-century set of armour was found in 2000, in the Peychova Mound from the Starosel complex. It consisted of an Attic (or modified Chalkidian) helmet, cuirass, shield, and plain bronze greaves. The cuirass consisted of a leather jerkin with a high collar. The official report says 'It had a vertical and a horizontal section' which probably means that it was shaped like a *linothorax*, which was in one piece but had a horizontal section that was wrapped around the body and joined at the side, and a vertical section which was pulled down over the shoulders and attached at the front on each side. This is the only example of leather armour currently preserved in Bulgaria.[59]

It is possible that groups of gilded silver appliqués found in fifth-century BC Thracian tombs were originally attached to a leather parade corselet, similar to the later iron corselets from Vergina and Prodromion. These were decorated with sheet gold ornaments (gorgons and lions' head masks). Something similar belonging to a composite outfit may have been found at Panagyurishte. There, the armour had rusted away, leaving gold strips and studs, as well as six rectangular silver appliqués with the head of Apollo, and two low-relief silver discs showing Heracles and the Nemean lion.[60]

Another leather jerkin found near Lovets had a belt to which were attached thongs for a scabbard. This was fixed with a bronze ring decorated with a reclining doe.[61] The mounted warriors on the sixth- to fifth-century BC Lovech silver gilt belt wear leather armour with *pteryges*.[62]

Other warriors wore broad scale iron belts, two of which have been found in Thrace. These belts are like Uratian bronze belts of around 600, used later by the Skythians and in various parts of the Achaemenid Empire, so it may be that Thracian warriors wore something similar. They were originally fixed to some organic substance, either leather or linen. It is not clear whether such a belt would have been worn below the cuirass, or as an alternative to it.[63]

Xenophon records Seuthes' Odrysian cavalry 'wearing their breastplates' in 400BC.[64] This probably represents an armoured bodyguard rather than suggesting that all Thracian cavalry were armoured.[65] They most likely wore the late improved version of the 'bell'-type bronze-plate cuirass. This was used in Thrace until the middle of the fourth century BC. The waist band disappeared, replaced by a narrow out-turned flange, and more carefully modelled anatomical relief lines. They had much larger armholes, and fourth-century artwork found in Thracian graves depicts the use of *pteryges* as well.

Instead of an upstanding collar to protect the throat, the neck was cut low, leaving the upper chest exposed. The edges were also not rolled-over bronze wire, but consist of a flattened border over 1cm wide, marked every 2–3cm by an iron nail.[66] This was covered by a crescent-shaped pectoral of silver-plated, gilded iron, decorated with bands of relief vegetal ornamentation.[67] It had a forward collar, and was held on by a narrow hinged strip fastened round the back of the neck with some form of catch plate.[68]

An example of this new type of cuirass is that from Dalboki, now in the Ashmolean Museum. Vickers[69] has dated the cuirass to the early fifth century BC although the tomb it comes from is clearly after 430BC.

Unearthing a suit of armour much older than the tomb in which it is found is common in Thrace, but Ogenova dates the cuirass to *c*. 400 and the similar 'Basova Mogila' cuirass to *c*.380BC, and this seems more likely.[70] Bronze cuirasses of this type are sometimes found without iron pectorals.

Such iron-backed collars were worn both in Thrace and Macedon, but probably had a longer tradition in Thrace. They were designed to be symbols of rank. There may have been two types of collar, one for parade (or just the afterlife), and one for battle, as a gorget of sheet gold was found with a plain iron collar in a Macedonian tomb at Vergina. Two other collars (from the fourth-century Mal Tepe tumulus and Vurbitsa), were found without cuirasses. The Mal Tepe collar was silver-plated and richly decorated with belts of floral and animal ornaments.[71] It had a width of 21cm and is dated to 350–300BC.[72] At Gaugamela Alexander wore an iron gorget, quite probably of the same type as these pectorals.[73] The flimsy gold early fifth-century Dalboki pectoral was perhaps laid over an iron pectoral, as there were traces of iron on the back, iron corrosion products on the front of the cuirass, and there were many corroded iron fragments inside the tomb when it was opened.[74] A *c*.350BC advanced form of iron pectoral with sheet-metal inlay from Katerini was worn over a composite cuirass decorated with gilded silver appliqués. This contrasts to a more workmanlike Macedonian gorget of bronze scales on leather that is dated from around the same time.[75]

It is not known what armour was worn when the 'bell' style went out of fashion, but a composite iron type with iron collar seems likely, to be replaced later amongst officers by the muscled cuirass.[76] Traces of iron at the neck and armholes of the Dalboki cuirass, and especially on the 'Basova Mogila' cuirass imply that these bell cuirasses were half bronze and half iron. Tim Everson proposes that they originally had an iron collar, iron- reinforced armholes and an iron flange at the bottom, but that these had rusted away.[77] In the same year his book was published (2004), two other suits of late-fifth- or early fourth-century BC armour were found with just such iron extensions intact. They are perhaps the most interesting suits of uniquely Thracian armour.

One of these was discovered in the mid-fourth-century Svetitsata tomb, in a tumulus about 2.5km to the southeast of Shipka. This consists of the usual pair of bronze breastplates (front and back), decorated with the spiral dragons on the front, but with iron extensions to cover the neck, shoulders, and waist. These were initially thought to be fifth-century lamellar armour but are now recognized as solid iron. The iron is attached over the bronze with rivets – there are signs of rivets along the edges of the right shoulder

piece. There was probably leather sandwiched between the iron and bronze to make the attachment points stronger. The waist section is a very wide iron skirt, indicating that this was cavalry armour. It was found with two iron swords and several iron spearheads, plus 144 bronze arrowheads. It is now on display in the Kazanluk museum, while another, similar, suit of armour is exhibited at the Archaeological Museum in Sofia.[78] This, the first use of iron plate armour in the western world, shows that Thracians were working in iron at least fifty years before the first entirely iron pieces of armour appeared. Everson says that it is highly likely that the Greeks experimented with similar suits of armour in the later fourth century, but no evidence survives because the Greeks didn't bury their armour in graves.[79]



Fig. 11. Typical decoration upon the Svetitsata armour, mid-4th century BC.

An iron cuirass, bronze helmet, 500 bronze arrowheads, and metal armbands covering from fingers to elbow were found in 1879 in a burial mound near the village of Rozovets in the foothills of the Sredna Gora Mountains, northeast of Plovdiv. Archibald suggests that the armbands were gold funerary bands or some kind of parade armour.[80] Unfortunately due to the turbulent times in which it was discovered, most other details have been lost. Bronze armbands with thickened ends have been found at several other sites (Karparchevo (three mounds), Debnovo, Stolat, Gumoshtnik, and Tumulus X at Malka Brestnitsa, all in central northern Bulgaria).[81] An iron corselet similar to the one found in Vergina (including the gold appliqués) has now been found in a Thracian tomb in Turkish Thrace but again no other details are available.[82]

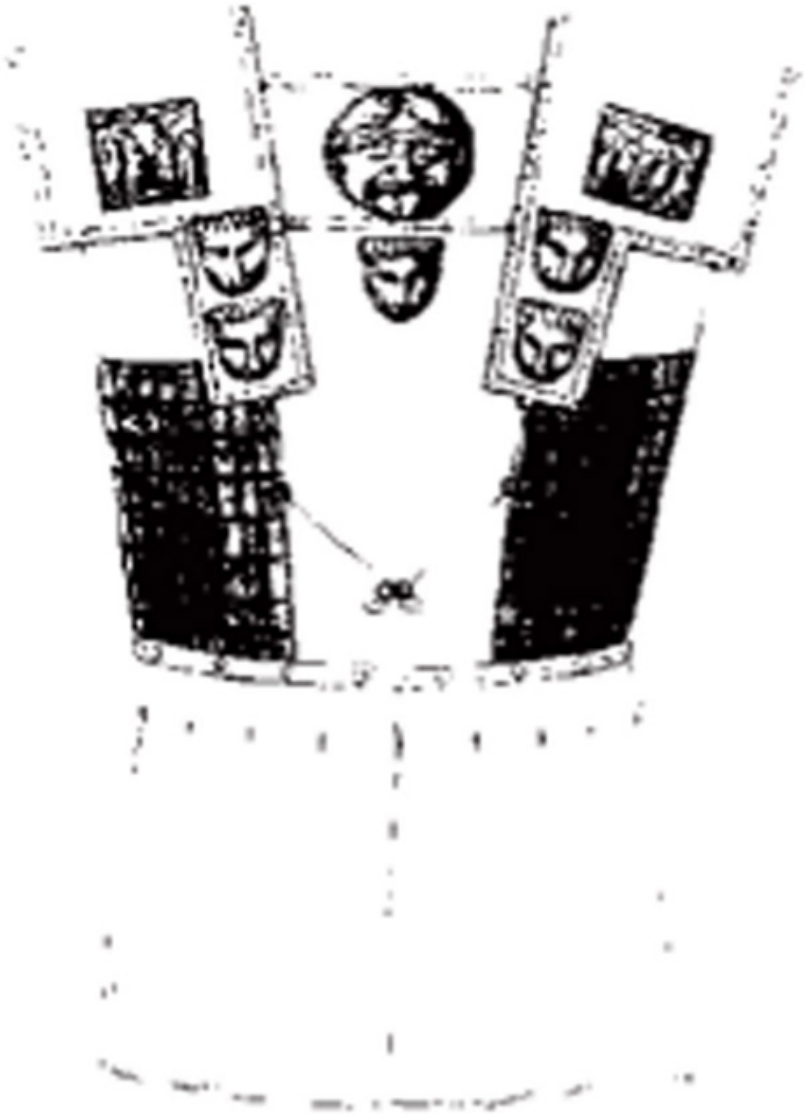


Fig. 12. Composite armour, mid-5th century BC, from Golyama Kosmatka (after Ljuba Ogenova-Marinova)

Plate armour supplemented, but did not replace, more flexible forms. A third-century composite or scale cuirass was recovered from the Golyama Kosmatka tumulus. It is described as leather chain armour. 'Cuirass' is sometimes translated in Bulgarian publications as 'mail'[83] and as no

Thracian mail armour is on display in any museum in Bulgaria,[84] this probably means scale armour with leather backing. It is decorated in the middle of the breast with solid gold lion's head appliqués. Several iron plates with remains of organic matter on the reverse and open-work swastikas on the obverse are probably also elements of the decoration of the 'chain armour'. There was an impressive protective collar made of leather, cloth, and gold attached. It was accompanied by a repaired Chalkidian helmet decorated with silver gilt appliqués, one in the form of the head of the goddess Athena. The helmet seems to have suffered damage in battle.[85] Kitov says the armour is similar to sets found at Vergina, in the Ukraine, and Douvanli. The middle section at the front had a massive, gold, circular appliqué with exquisitely modelled vegetal ornaments, along with a lion's head with flowing mane and menacing open mouth in the centre.[86]

North Thracian Armour

The north Thracians used similar types of amour to the Skythians. Several appliqués from Letnitsa (in what was Triballian territory) show a mounted warrior wearing a scale armour corselet.[87] His corselet is divided into *pteryges* below the waist, in Greek style. Unlike Greek corselets it lacks shoulder pieces, and appears to have short sleeves. On other plaques he is covered from shoulders to feet in what looks like mail, but what is probably scale armour or cloth. Scale armour pieces covering both arms and legs have been found in Skythian tombs, so full body armour may have been worn.[88] The cheek-piece of the Agighiol gilt silver helmet bears a horseman similar to the Letnitsa heroes, except that he has curly hair and a smooth (linen or leather) cuirass.

A north Thracian noble would thus wear long sleeves and trousers, and a bronze or iron scale or composite metal cuirass, which had scaled *pteryges*, short sleeves, and a small collar of upright plates. The cuirass was made of iron or bronze scales or strips fastened with bronze rings to a leather backing. It continued to be worn during the fourth century BC and after, in conjunction with bronze or other metal armour.[89] On a cuirass found in a Getic grave of c.300BC, the iron strips were decorated with a small silver-wire snake, and small bosses within embossed circles, linked by tiny rings.[90] This type of armour often included a gilded and highly ornamented iron-backed collar-pectoral.



Fig. 13. Fully armoured Getic horseman engraved on 4thcentury BC helmet from Agighiol.

He would also wear greaves, or splinted/scale Skythian-style arm and leg armour, and a helmet based on a local design. His cloak and tunic would have been marked in the traditional Thracian style. A scale armour corselet from first-century Beroe has been found but scale armour is generally rare south of the Balkan range.[91] A fourth-century BC scale armour corselet sewn onto a leather backing was found nearby, in 20,000 leather and bronze pieces, and is undergoing restoration in Yambol Museum.[92]

Greaves

Greaves have been found in several Thracian graves, and Thracian art confirms warriors wore them. During the classical period, only a few Thracian cavalry (possibly only the officers) wore greaves. Greaves (called

knimis in Greek) were made of thin, flexible bronze and lined with felt, leather or cloth, and were sprung onto the leg. Like the cuirass, they were originally made to fit the individual person, and covered the knees.[93] In Hellenistic times, this type continued to be worn by the aristocracy but cheaper greaves were made for the infantry in standard sizes, covered just the shins, and had straps wrapped around the knee and ankle to compensate for the less secure fit.[94] In either case, if the bronze was too thick it was difficult to get them on and off, and if they were incorrectly shaped, they cut into the ankles. The calf muscle supported them, so having big calf muscles was an advantage. If they were riding on the top of the foot they would quickly rub away the skin and would be most uncomfortable.[95] A fourth-century BC pair from Pletena has traces of the tying straps below the knee and above the ankle.[96] The purpose of the ankle strap was to control the bottom of the greave and keep it from flopping around. The strap (or metal) behind the leg, above the calf muscle, supported the weight.

These two basic types of greaves are found in two forms observed only in Thrace – the native/ceremonial and functional types. The native/ceremonial type was decorated and possibly gilded, whereas the functional type was just plain bronze. Three elaborately decorated silver gilt Thracian ceremonial greaves have been found, one at Vratsa in Triballian territory, and two at Agighiol, on Getic land.[97] The 46cm-high Vratsa greave is too large to have been worn, so it must be purely ceremonial.[98] They do have other features of greaves that were worn by Thracian kings. For instance, they have the face of the Thracian mother goddess on the knee covering. In this respect they are similar to Greek greaves, which were occasionally adorned with Gorgon heads on the kneecaps. An armoured Thracian horseman wearing greaves of this design can be seen embossed on one of the Letnitsa plaques, and two pairs of bronze greaves of this pattern that could be worn have now been found. They combine features of the ceremonial and functional types, and would probably have been worn in battle. They were of plain bronze, but the top parts have beautiful reliefs of the mother goddess' face worked into them. Strange individuals, one male, and the other female, replace the Gorgon on the Agighiol greaves.[99]

One of these pairs, dated to the third century, was found in the Golyama Kosmatka tumulus (near Shipka) in 2004. They have the head of a goddess resembling Athena modelled on the part covering the knees. She is wearing an enormous necklace with large pearls. Her hair is long, curly, lined by locks and curved like snakes' bodies. Her head is crowned by a magnificently decorated helmet. On her forehead is the tiny full-face figure

of Pegasus. On the side walls the bodies of griffins in profile are hammered out, with enormous wings that reach to the goddess' neck.[100] These greaves probably belonged to Seuthes III. Other decorations were also used. A pair of bronze fifth-century greaves found at Starosel in 2000BC was decorated with double axe-heads, the symbol of royalty.[101]

Greaves of the Greek/functional type are rare, and less common than other pieces of imported armour, in Thracian graves. At least six pairs have been found in Thrace. They were definitely used, possibly for a long period of time – two pairs of these greaves (from different locations) had been repaired. One pair had been lengthened in the process, and the left one had originally been made for the right leg. This pair had also been fitted with iron chains at the back.[102]

Greek texts, grave goods and vase-paintings all make it clear that no Thracian infantry wore greaves until the fourth century BC. They then became more popular as part of the equipment of the heavy peltast. One pair was found in the Kyustendil region with fourth-century infantry gear (including an oval shield), and probably belonged to a Thracian mercenary, or one of the 'free Thracians' whom we hear of, fighting for or against the Macedonians.[103] It matches the equipment described at Pydna (168BC) quite well:

> First marched the Thracians, who … inspired … the most terror; they were of great stature, with white [or bright] and glittering shields [*thureoi*] and black tunics under them, their legs armed with greaves.[104]

'White and glittering shields (*thureoi*) and greaves' could possibly mean that both the shields and greaves worn at Pydna were faced with polished white metal – silver or tin laid over the bronze.[105] Even if some sort of guard unit were involved, as far as the greaves are concerned, this now seems unlikely. Although this description fits the Agighiol and Vratsa greaves, even Thracian kings did not have the greaves that they wore during their lifetime decorated in this fashion. It is more likely that the men at Pydna simply polished the bronze greaves to make them shiny.

Shields

The most distinctive feature of the peltast was his shield, the *pelte*. The infantry *pelte* was very likely invented by the Thracians.[106] Although some texts seem to imply round *peltai*, in Greek art they are always crescent-shaped, though the exact proportions vary. It was made of wickerwork, and generally covered with hide, though some illustrations suggest uncovered

wicker. ‘Traces of such a shield made of some organic material, fixed with bronze nails, have been found in a tumulus near Debnovo in the Lovech district.’[107] On the staircase reliefs at Persepolis, the Skudrians each carry two spears and a shield almost hemispherical in shape, with vertical ribbed patterns.[108] Bronze-faced *peltai* are mentioned in Greek hands (they flashed their *peltai* in the sunlight), but not Thracian.[109] Most vase paintings show the *pelte* decorated, either with a simple face, eyes, or with more complex designs perhaps inspired Thracian beliefs. The crescent-shaped *pelte* apparently continued in use into early Roman times, as Roman troops found some lying on a battlefield and were disappointed to find that there weren’t any Amazons nearby.[110]

Thracian peltasts are not shown on Thracian art, and only about sixteen are painted on Greek pots. With so few examples known, you can speculate that, since it is obvious that certain animals (e.g. the boar, dog, horse, stag, griffin, bear, snake, and eagle) were very significant to Thracian warriors (the boar in particular appears repeatedly in metalwork and tomb paintings), it is not unlikely that they should paint such animals on their shields. Other tribal cultures are known to have favoured certain animals as their totems so maybe the Thracians did, too.



Fig. 14. Peltast shield designs from Greek art, 6th–4th centuries BC.

We have only two examples of animals painted on *peltai* from Greek pots – a *pelte* painted with a snake and another with a bird of prey (and fertility symbols). To say that each tribe painted a particular animal on its shield you would have to argue that we do not have a fair sample of the evidence – that with more surviving vase-paintings we would see the Thracian shields more elaborately painted and with certain tribes favouring

a certain design.

In other Thracian artwork the same animals occur again and again, right across the region, so although this may occur in other tribal societies; it does not seem to be true of the Thracians. Also, we have many Thracian cloak designs, which probably were worn on a tribal basis, and it is impossible to look at the cloaks and see any tribal resemblance or difference between vases. A tribal shield design is therefore unlikely.

Some *peltai* are painted with a cloth or leather skirt hanging from them, to protect against missiles. These are usually shown in the possession of Amazons in Amazonomachy vase-paintings, so the use of the skirt (which would make the shield heavier and less manoeuvrable) may be just the artist's imagination. On the other hand, it may be that the increase in combat between peltasts and other light troops in Greek armies, rather than peltasts and hoplites, made this measure necessary.



Fig. 15. Thracian youth listening to Orpheus playing a lyre on an Athenian red-vase, c. 500–450BC. Note the pelta slung on the back.

The *pelte* was usually carried with an arm strap (the *porpax*) and a

leather or cord handle at the rim (the *antilabe*), or slung on the back using a back strap.[111] A less common alternative was the single central grip. Xenophon describes a Thracian whose slung *pelte* caught between the stakes of a fence he was trying to clamber over.[112] Although the arm strap is sometimes shown as indistinguishable from the bronze *porpax* of the hoplite shield, this could be a heroic artistic convention on the part of Greek vase painters.[113] The single central grip would then have been more common. Thracian *peltai* with such a grip frequently are shown as having both parts about equidistant from the centre of the shield. The *porpax* often consisted of two cords that crossed each other in an 'X' arrangement. This facilitated the single hand grip. If the *porpax* was held in this way, the shield could easily be moved around, but nothing else held in the left hand. If the arm was put through the *antilabe* to provide a secure grip, it was unstable, and would flap around on the horizontal axis.



Fig. 16. Thracians with *peltai* fighting each other on a blackfigure amphora, c. 550–500BC.

The *pelte's* shape, light weight and strap arrangements had another advantage for the peltast – they enabled him to carry a weapon in his left hand. This is one reason why the *antilabe* was made of cord, as it made it more comfortable to hold a weapon. If the left arm was put through the *antilabe* and the *porpax* held with the left hand, the latter could also grip a

long spear or a bunch of javelins. Alternatively, holding a shield this way allowed a peltast to grip a long spear two-handed, with the bulk of the shield being positioned above the weapon.

This may have facilitated the lengthening of the spear to 4m, as discussed below. A shoulder strap was then added. A fifth-century gold ring (length 3.3cm) discovered in 2000 from Tumulus No. 1, Chernozem, near Plovdiv, apparently depicts a warrior with such a shield carved into its rock-crystal face.[114] A brief look at the ring reveals what appears to be an ordinary naked hoplite. On closer inspection the shield is deeply curved and has two rims and a supporting shoulder strap. The strap only goes under the arm, and there is no corresponding strap coming from the top of the shoulder. This indicates that either the artist is incompetent or the difficulty of depicting a person in such detail in such a hard medium. If the artist is simply inept (which is unlikely given his accurate depiction of the muscular man) then the 'strap' is actually the inside rim of the hoplite shield.[115] This is the best explanation that fits with the date of the ring.

If in fact a strap is meant to be carved on the ring, it is highly significant: if the ring is correctly dated, it predates the use by Macedonian phalangites of such a strap and deeply bowled (though rimless) shield by more than fifty years. It lends credence to theories suggesting the Thracian origin of the *sarissa* and the Iphicratean reforms.

Having a strap that leads from the bottom of the shield to the man's back, is somewhat like a *pelte*, but nothing like a hoplite's *aspis*.

A much less likely interpretation of the shield is that it is a ribbed shield shown front-on at an angle, and it is either oval or crescent-shaped (more likely the former). The twin rims then become either two spines or an uneven surface such as that which might be found on a wicker shield. Although the man is depicted in the usually naked heroic Greek style, thrusting his spear underarm, his shield is not. This then becomes either the only known depiction of a *pelte* found in a Thracian site or (more likely) the earliest-known picture of a Thracian ribbed shield and forerunner of the *thureos*.



Fig. 17. Naked warrior with spear, double-rimmed shield and (possibly) supporting shoulder strap, on the 5th-century BC ring from Chernozem.

Greek hoplite shields were rare in Thrace. Shields of the *aspis* type may have been used by heavy cavalry in a dismounted or ceremonial role, as the shield bearer on the Sveshtari tomb seems to have this type of shield. Parts of only two have been found: a bronze rim and palmetto-decorated handgrip were found in a fourth-century tomb near Topolovgrad, and a

fragment of a similar rim was among grave goods (including armour) at Svetlen.[116] The latter was decorated with concentric circles.[117] Three figures in frescoes from the antechamber of the Alexandrovo tomb are using the *aspis*. On one of the walls of the antechamber to the Alexandrovo tomb, two warriors are painted in combat with a cavalryman. One man has a large convex shield, evidently an *aspis*. The shield is decorated with stars. It has a black surface (leather?), with its periphery outlined by a white band with red circles.[118] Although it would seem that these are merely heroic scenes typical of tomb paintings, they do have some uniquely Thracian features. One is that although there are three separate scenes, each is in combat with a cavalryman - not the typical Greek hero at all. Another is the costumes of these men – one is naked, but the other two are in the same garb as the figures of the dome of this and the Kazanluk tomb – the red-brown tunic with white stripes, or the white tunic with red-brown stripes. They are unarmoured except for a Thracian helmet on one figure. If these are not merely barbarized versions of standard Greek motifs, they may have been based on a Thracian prototype, perhaps some sort of bodyguard for the king.

Part of a round shield (dated 300–285BC) was found with the oval Dolna Koznitsa shield. It measures 80cm in diameter. It had an inscription in Greek of which some letters have been read, and the archaeologist studying it suggests that is a trophy. It is made of bronze sheet upon wood with a shield boss, although the latter hasn't been found.[119] A mid-fourth-century circular shield, made of bronze covered with leather inside and out, was found in Peychova Mogila near Starosel. The external leather may have been decorated and it is hoped that this will be revealed during preservation work. The official description does not say if this was an *aspis* or some other type of shield.

A few illustrations of the early third century BC still show a small round *pelte* shield in use but by mid-century it has been replaced by the *thureos*. They appear at first in citizen armies such as the Boeotian League,[120] but later in Successor armies as well: Polybius records *thureophoroi* in a Seleukid context by 220BC who may well be mercenaries.[121] Thracian and Illyrian infantry probably adopted the shield before the Greeks.

New Shields

Later Thracian infantrymen are shown using oval shields, and may have given up the *pelte* for a larger oval wicker shield, or the much heavier *thureos*. The *thureos* may have been borrowed from the Illyrians, who had been carrying similar shields from at least the seventh century BC.[122]

Possibly the earliest indication of Thracian use is an elliptical shield stamped on a bronze coin of Ketriporis (356–352BC). The shield is portrayed 'suspended by a strap on a nail.'[123] The Kazanluk friezes also predate the Celtic invasions of 279. They present several examples of long flat oval shields being used by Thracian warriors. One of these has the distinctive rib of the *thureos*, but the others do not and it is possible they may represent a flat ribless shield.

Such a large, flat, oval (almost egg-shaped) shield was found in the village of Dolna Koznitsa near Kyustendil. It was made of leather with 'cross leather lines' faced with bronze that glitters even today.[124] Its dimensions are 90 × 65cm.[125] This may have been the type of shield carried by the Kazanluk men. Alternatively the Kazanluk shields might have been wicker, as they are painted rimless, wicker-coloured and flat. They have three loops hanging down on the inside, used for a single handgrip, or perhaps for slinging on the back.



Fig. 18. Warrior from the corridor of the Kazanluk Tomb, late fourth century BC.

In the Dolna Koznitsa mound grave were black-varnished imported vessels that date the funeral within the period 300–285BC. The shield was found in 1989 during rescue excavations to save the site from treasure-

hunters. The archaeology of the site still hasn't been published completely yet, but the funeral rites leave no doubt that this was a Thracian burial. The other weapons and armour in the mound were: a bronze Chalkidian helmet, a set of bronze greaves, iron spear points, and a pectoral of gold-plated silver ornamented upon an iron background. Besides these there was a golden necklace, pearls, a gold-plated iron ring, and a burial wreath made of clay and bronze elements covered with golden foil. Furthermore there were three silver or silver gilt harness appliqués ornamented with mythological scenes. These indicate that this was the tomb of a noble and a horseman but the tomb was at least fifteen years too early for the shields found there to have been used on horseback.[126]

The *thureos* was made of wood, with a central wooden spine and usually an iron boss.[127] Its name is derived from the word for 'door-stone' (i.e. an oval almond-shaped door stop).[128] It could be oval or rectangular in shape, covered in leather, and painted. They were reasonably narrow, as Livy describes Galatians having 'insufficient protection from their shields, which were long, but not wide enough for the size of their bodies'.[129] Plutarch repeats this description, saying the Achaean citizen troops at the Battle of Sellasia in 222BC used *'thureoi* too narrow to cover the body.'[130] They could be quite short, as Livy also contrasts the Gauls' small shields with the larger 3ft/1m round shields carried by the Roman *velites*. However, they were normally long and narrow, as shown by statuettes of Galatians in Seleukid service.[131] The thick rim sometimes depicted was probably the leather covering doubled over at the edges. The shield's strong construction and central handgrip may have allowed it to be used as a weapon to crush an opponent.[132]

Sekunda[133] says that a mid-second-century BC version of this shield from Sidon seems to have had a metal rim (perhaps bronze, not iron) and with a metal spine on top of, or even replacing, the wooden one. However there is no evidence that the Thracians used this later type, which would have made skirmishing difficult. A *c*.second-century stele from Phrygia (now in the Istanbul Archaeological Museum) shows two more likely possibilities.[134] It displays two men who have been killed by the Bithynian Menas. One has a conventional ribbed oval *thureos*, while the other has a ribbed rectangular *thureos*. One of these two men, but we don't know which, is a Thracian. Another grave stone from Bithynia also shows Bithynian infantry with the oval *thureos*, so the oval shield is more likely.[135] A second-century Bithynian warrior's tombstone from Alexandria also shows a (yellowish or white) oval *thureos* with a spine boss.[136] Menas' stele is close in date to the Battle of Pydna (168BC), so perhaps the

Thracian infantry at Pydna carried one of these types of shield. The Greeks did not use the *thureos* until after the Galatian invasion in 279BC, so the shield used by *thureophoroi* was probably originally adapted from of a Celtic shield.

N G L Hammond says that one of the infantry kneeling on the ground in the Pydna Monument reliefs (his Fig. 8) is Thracian. This man is using a large bowed circular shield, decorated with the concentric circles seen on Macedonian shields from the same reliefs. This could indicate the type of shield and shield design was used by Thracian infantry in Macedonian service. It is more likely that this is a stylized representation of a fallen Macedonian and that he is not Thracian – there aren't any distinctively Thracian characteristics to this figure, and it does not correspond to Plutarch's description of the Thracians at Pydna. Hammond says he is Thracian because he lacks a helmet and because he wears 'short trews' (short under trousers). Archaeological evidence suggests that a Thracian would be wearing a helmet and that Thracians did not wear trews.[137]

The shield bosses from a few shields from the pre-Roman period have been found in Bulgaria. One, from the Sashova tumulus, was found with a Thracian helmet (without cheek-pieces), mail armour, a big and heavy iron sword and some spearheads.[138]

The use of Thracian shields by cavalry will be further discussed in the next chapter.

Chapter 4

Weapons

Swords and Knives

The Thracians were famous for their forward-curved swords, but they also used a long sword and the Skythian *akinakes*.[1] Swords were most often only secondary weapons and, to begin with, only nobles could afford them; the rest of the troops made do with curved daggers. Later on, though, swords became more common.

There are a few instances in ancient texts of Thracians using swords as their primary weapon, instead of just as a sidearm. The Dii hill tribesmen are always referred to by Thucydides as 'swordsmen' or 'armed with swords' (*machairophoroi*).[2] The only other time that Thracian swordsmen are mentioned is when Croesus hired 'many Thracian swordsmen'[3] for the Lydian army. Thracian infantry probably continued to use a variety of native sword styles until the Roman conquest. Thracian cavalry, however, are always shown on metalwork, tomb paintings, and reliefs with long, straight swords from around the third century BC onwards.

The Bronze Age and Earlier

Knives

Many weapons from the Chalcolithic (Copper) and Bronze Ages have been found in Thrace. Metal knives from the former period do not seem to have

survived. At least three main styles of daggers from the latter period are known. One, from Rupite, in the Petric region, is not much more than a small double-bladed bronze knife. It is 18.3cm long and 3.5cm wide. It is triangular-shaped, with a rhomboidal cross-section. Two incised lines outline a raised longitudinal rib. The handle was made of a perishable material, and was riveted to the blade. There are two symmetrical holes at the broad end of the dagger for attaching the hilt, filled by two small decorative electrum nails with circular heads. Unfortunately, as with all the other daggers, the handle has not survived. Similar daggers are known from graves dated to the same epoch from Amorgos, Greece.[4]

The second style is one of the most widespread weapons in the Black Sea area, from the Caucasus to the Aegean. It is much longer and wider, being 31.8cm in length, and 10.8cm wide. Its shape is of a broad triangle. A trapezium-shaped wedge is in the base of the blade. On both sides of the wedge next to the base, there are two semicircular holes. There is also a hole at the upper end of the wedge. These holes were for pins fixing the dagger to the handle, which has perished. On one side of the dagger, there is what appears to be a fabric imprint – vertical patterns of interlaced wavy lines.[5]

The third type of dagger is much more menacing, being long (up to 30cm long) and narrow. It is triangular in shape and has a ridge down the middle of the blade. There are again two holes at the top for attaching the hilt.[6]

Knives are not often depicted in art, but the most common found in Thrace after the seventh century BC are the curved, tanged dagger and the T-shaped knife. The single-edged curved knife was a popular weapon that even penetrated into the Pontic regions in the second half of the fourth century BC. Swords and daggers were kept in sheaths of wood or leather, which were reinforced with metal strips. Some sheaths were made of more precious materials and were richly adorned. At Belogradets, Varna district, an eighth/seventh-century BC dagger sheath was found fitted with soldered gold wire trimmings and amber inlays. Archibald says that the Dii were probably armed with curved knives, as the *machaira* is rare in pre-Hellenistic Thracian tombs, and was probably reserved for chieftains only.[7] Herodotus[8] says that the Thracian infantry in the Persian army were armed with daggers as their secondary weapon – not swords.[8] The same type of curved, tanged knife was found in the tombs of the rich and the poor – in the latter case it was the most valuable possession, along with a pot or a fibula.

Swords

From an early date there was a typically Thracian sword known for being longer than other swords.[9] Some Thracian Bronze Age swords are really quite remarkable, being up to 78cm long, almost as thin as a modern rapier, and very similar in appearance to it.[10]The *Iliad* says: 'Helenus then struck Deipyrus with a great Thracian sword'[11] and Ovid says that Polydorus is 'killed, disfigured with deep wounds of Thracian swords.'[12] These swords were richly decorated, as the *Iliad* also mentions a 'silver-studded sword – a handsome Thracian sword' that had been taken from Asteropaeus the Paeonian and was offered up as a prize in a contest of arms.[13]

Bronze swords, daggers, and spear points were cast during the Bronze Age using the same technique. This involved using a stone mould (technically called a matrix or a form) with one or two sections. Artisans made the moulds for foundry men. By contrast, iron weapons had to be forged by repeatedly beating and folding a redhot metal bar, a process which could be performed by any blacksmith.[14] Several moulds for bronze weapons have been found in Thracian areas. One such stone sword mould was found in a hoard from Pobit Kamak, in the Razgrad region. It was made from a talc-like shale, and is dated to the late Bronze Age (1600–1100BC). The outline of a short sword with a double-edged blade is cut half-depth into each of two matching stone slabs. Another mould for casting the handle would have been attached to this pair. The blade is leaf-shaped, decorated with central vertical grooves. The mould is 41cm long, 3.2cm high, and has a width varying between 8.5 and 9.5cm. Both parts of the mould are pierced with holes so that they can be tied together. There are grooves on one of the slabs to allow air to escape. Sword-daggers of this type were widespread between the Prut and Dniester rivers.[15]

It is remarkable that the swords from this period are all straight. In addition to the short, straight dagger the main weapon used by the Thracians from the Bronze Age onwards was the sword.[16] Its form resembled in many respects that of swords used in the late Bronze Age culture of the neighbouring Mycenaean empire (approximately the third quarter of the second millennium BC) and also bore a resemblance to that used by the Thracians' northern neighbours in the Carpathian basin. This was the leaf-shaped 'Naue Type II' sword, a 28in flange-hilted cut-and-thrust weapon with a parallel blade that slightly tapered about 9in from the tip.[17]

The bronze weapons of the Thracians of this period are found throughout the Danubian Plain, where two-edged swords with a very long

point were used. The rapier with a cross-shaped handle, which made thrusting possible, was also known. The rapiers found in Thrace are of the same quality as those discovered in Greece, and it was thought for a long time that they had been imported from Mycenae.[18] This idea changed with the discovery of such items as the stone moulds mentioned above.[19] Bronze swords from northern Thrace were not as good as swords found in Greece as they were cast without forging. Over 300 of this 'Carpatho-Hungarian' type of sword have been found in what is now Romania. Greek/Mycenaean swords were subjected to heating and forging after casting.[20]

The Iron Age

Long Swords

The length of the blade may be what distinguished Thracian swords from other early (Greek) swords. An unpublished fourth-century Thracian tomb excavated near Shipka in Bulgaria in 1993 may contain paintings of two long, straight swords that would be good candidates.[21] These longer swords may have inspired Iphicrates to introduce them for his Greek troops. Longer swords would suit the loose formation and individual style of fighting favoured by peltasts and other light troops. They were also better for cavalry use. It is difficult to take a long sword out of its scabbard (or even to swing it) without getting in the way of the person to your right if fighting in a tightly packed group. Despite the apparent similarity to Celtic swords, and the large numbers of long Celtic swords in Bulgarian museums, it is unlikely that the Celtic swords influenced the Thracians.[22] The Celtic invasions occurred long after Iphicrates was making his peltasts carry longer swords.

The straight Greek *xiphos* was commoner in Thrace during the fourth century BC and was widespread in soldiers' graves of the third. In the Hellenistic period, a straight Macedonian style was also widespread – this had a bone or ivory handle, and the hilt and pommel were cast in one piece with the blade.[23] Swords would probably be worn from a baldric.[24]

The sword sheath was equally well presented. One (for a straight, long sword) was found in the Golyama Kosmatka tomb with a Chalkidian helmet with Seuthes III's name on it and a pair of bronze greaves (moulded to include the face of the Thracian mother goddess on the knees). The sheath was made of iron, wood, and leather, decorated with two solid-gold, rectangular appliqués. They are slightly different but each displays, within a splendid framework of plant and geometric ornaments, an armoured man with long wavy hair, holding a long spear vertically in his right hand.

Although each is small enough to easily fit in the palm of your hand, a lot of detail is visible. It is a full-face portrait in which he is standing upright on muscular legs, with the weight falling on the left leg. He wears what the translator calls 'chain armour' but it is more probably a leather *spolas* or a composite scale and linen *linothorax*, under which a short chiton with short sleeves is showing. His left hand is on his hip. Most interesting of all is perhaps the rope or snake which is winding around the spear. Kitov says that this is an image of Ares, as it is logical that an image of the god of war should be placed on a sword, and the cult of Ares was popular in ancient Thrace.[25] If so, then this is an unusual pose for Ares to adopt, and a snake is not usually shown with Ares. The 'snake' doesn't have markings, a head, or a tail: it looks more like a rope, although if it is a rope its purpose is hard to explain. Either way, this is an example of unique local Thracian craftsmanship.

The Akinakes

Thracians in Skythian-style clothing are shown wearing the *akinakes* on Persian reliefs, and many have been found in Bulgaria and Romania.[26] This was originally a Skythian weapon but in Thracian use the *akinakes* is usually longer than its Skythian counterparts.[27] It was prevalent among the Getai and Triballi, in northern Thrace. The Skudrian throne-bearer from Persepolis Tomb I wears a Saka coat and *akinakes* but this is an uncommon feature. The Skudrians on some tombs and on the left side of the Apadana stairway in Persepolis lack the *akinakes*, carrying only javelins. In the latter case the man in Persian dress who leads the Skudrians has an *akinakes* prominently displayed on his right side, so it may have been a symbol of authority. It would make sense for the man in charge to be Persian or Median, in which case the frieze shows a Persian leading some Skudrians.

The most distinctive feature of the *akinakes* was its scabbard, which had a large flap that allowed the sword to hang loose at an angle to the belt. It was made of wood covered with leather, and worn on the right side.[28] This design possibly made the sword easier to use on horseback. The handle and pommel were of simple but functional design. Fifth-century BC examples had pommels consisting of two narrow strips of iron rising and curling gracefully inwards. This changed in the fourth century, when the pommel became a simple oval counterweight. The handle also changed from a cylindrical to a double-tapered or oval shape that was easier to hold.[29] One fourth- or third-century Thracian iron *akinakes* has a leaf-shaped, double-edged blade 39cm long and 4.5cm wide and a gilded sheath. The upper part is separated from the blade through horizontal

grooves and terminates in a spring for attachment to the handle. The hand-guard terminates in stylized rams' heads and there is a palmette resting on an anchor-like pediment in the centre.[30]

The Machaira, *or* Kopis, *and Other Thracian Curved Swords*

Several styles of curved blades have been found all over Thrace. They range from the crudest forms to finely made copies of the *kopis*. Similarly, the Kazanluk paintings show a mixture of strange, long, curved swords - perhaps when used by the Dii, these are what Thucydides[31] calls the *'machaira'*, that being the nearest Greek equivalent. These swords are curved both ways, and look unlike any other Greek or Roman sword (some may in fact be *rhomphaia*s).

The sword known to the Greeks as *machaira* or *kopis* was a heavy slashing sword with the cutting edge on the inside of a long, slightly curved, blade. It came into general use in Greece early in the fifth century.[32] However, this sword was rare in classical Thrace. During that time this weapon was reserved for use by nobles, and had considerable prestige value. These swords were probably associated with royalty, as they are only found among the funeral offerings in rich Thracian tombs. Ordinary troops used the curved knife instead.[33] Only three pre-Hellenistic examples have been found in Thrace. One, found near Duvanli, is a well-preserved example equipped with an ivory-decorated hilt.[34]

A third-century *kopis* found in Thrace is 46cm long and 5.5cm wide. It is decorated with a longitudinal groove in the centre and a band of engraved circles with central dots arranged between the groove and the outer edge.[35]Another *machaira* belonging to an American collector has a blade that is a 'wedge' rather than a 'T' shape, with a thick back. A close examination showed that the blade was some kind of steel and not wrought iron. The handle could be quite elaborately decorated – the Kazanluk museum displays a *kopis* decorated with an eagle's head as the hilt, with other gilt decorations on the handle. A similar *kopis* was found at Sozopol.

Thracian metalwork such as the amphora from the Panagyurishte treasure sometimes depicts long, curved swords – in this case single-bladed, with a straight back. These swords are generally slightly longer than a man's arm (i.e. about 60–80cm long if the proportions illustrated are correct) and are shown being used in an overarm hacking stroke. Although the usual caveat about weapons being displayed in a heroic/mythological context applies here, it is shown in great detail, the fluting on the blade being clearly visible. There is a 70cm-long cleaver in the Kabyle museum that fits this description exactly, and has the form of a *kopis*. It must be a

rather heavy sword and is certainly too big for a hoplite, but usable by a peltast or cavalryman.

The Sica – *Sword or* Rhomphaia?

The *kopis* was mostly replaced in cavalry service by a long sword near the end of the fourth century, but Thracian cavalry of the late Hellenistic period also used the *sica*, a large curved sword. This seems to be the Roman name for any curved sword or knife, as it was also used for the sword of the Thracian style of gladiator, and for Celtic knives, so the cavalry *sica* was probably like the *kopis* or the traditional Thracian curved swords. In 130BC a Thracian cavalryman fighting for a Pergamene pretender cut off the head of the Roman consul Crassus with a single blow from his *sica*.[36] In 163BC at the Battle of Marissa, a Thracian cavalryman (probably using a *sica*) chopped an arm off a Jewish rebel, also with a single blow.[37] These actions are similar to the fight at the Granicus River, when Alexander was nearly killed but his life was saved when Cleitus cut off the shoulder of the Persian who was about to kill him with a curved sword.[38] These actions therefore do not require the use of a *rhomphaia* (as suggested by Sekunda[39]), which in any case was probably too big and unwieldy for use on horseback. The *sica* and the *rhomphaia* were more probably two different weapons.

The Rhomphaia

To students of military history, the most famous, deadly and mysterious Thracian weapon is the *rhomphaia* (*rumpia* in Latin). Its existence is virtually unknown by other historians, and some who were unaware of the Bulgarian and Greek archaeological evidence say it didn't exist at all. In the hands of the Dacians (descendants of the Getai), the *rhomphaia*-like *falx* could chop off Roman limbs with a single blow. Introduced around 340BC (or, based on the Greek evidence, possibly earlier), the Thracians found that it was quite effective against cavalry and elephants.[40]

The *rhomphaia* was a two-handed cutting weapon with a long handle and a straight or slightly curved blade, a bit like a long-handled, straightened scythe. The handle and blade were about equal in length, and were cast as one piece. It was a heavy weapon, being iron for almost all its length. The average weight of the excavated swords in their present rusted condition is around 0.77kg. The nature of the *rhomphaia* was argued about for some time in western journals, in complete ignorance of Bulgarian discoveries that had been made long before. Some argued that the *rhomphaia* was only a sword as, for instance, the word is used

interchangeably with *machaira* in the Septuagint Bible.[41]

The *Rhomphaia:* Archaeological Evidence

About fourteen *rhomphaia* blades have been found in Bulgaria, and one in Greece. Nearly all of them have been found south of Plovdiv, mostly in the area once inhabited by the Bessi. They are all about 110-145cm long. One has a blade as long as its handle (about 50cm long); another has a 60cm-blade and a 50cm-long handle.[42] Another *rhomphaia* sold on eBay (provenance unknown) to an American collector, was 35in (89cm) long, with a 2.8cm-wide blade.[43]

The initial dimensions of the last blade may have been different, as it was originally ritually destroyed by being curled up into a twisted, tangled ball but the supplier carefully straightened it out again when he learnt the buyer preferred it that way. This is not the only such weapon to receive this kind of treatment – a *rhomphaia* discovered in Kabyle was ritually destroyed in exactly the same way. The Kabyle blade is the only one found outside the territory of the Bessi.

Ten of the Bulgarian iron blades, all made to the same pattern, were discovered between 1907 and 1969 in the middle and western Rhodope mountains, in southern Bulgaria. They are now on display in the Blagoevgrad Museum, the Plovdiv Archaeological Museum, the National History Museum, and the National Archaeological Museum in Sofia. On these weapons, the hilt has a rectangular cross-section and is rather elongated. There are two iron tines preserved at the ends of the handles of some of the extant examples. They are parallel to one another, about 5cm apart, and stick out in the same direction as the blade. These allowed wooden or bone grip plates to cover the long iron core of the handle. The plates were held on with bronze rivets, which have also been found on the excavated examples, along with holes for the rivets along the centre line of the handle. On these examples the thickness of the handle when covered has been calculated at around 1.7cm.

In one 145cm-long sword (now in the Blagoevgrad museum), 'the second part of the handle is 51cm long, 1.8 to 1.6cm wide and average of 1cm thick, the edge on the periphery having higher relief than the back of the handle.'[44] I think this means the blade. This second (longer) part of the handle [does he mean the blade?] was not covered. This is suggested because, on the whole length of both sides of the blade, there are two longitudinal grooves decorating the blade on the thickened edge. This part also lacks holes for rivets, which would have been necessary if there had been lining on this part of the handle.

The only *rhomphaia* found outside Bulgaria is in the Komotini Museum and was found in Symbola on the Greek side of the Rhodope mountains, in the Rodopi sector of Greek Thrace. This is possibly the earliest-dated such blade, being found with an early type of Chalkidian helmet and dated (by a black *kantharos* also in the tomb) no later than 350BC (and quite possibly earlier). As it was found in, or close to, Dii territory it gives credence to the theories suggested by some that the Dii 'swordsmen' were armed with *rhomphaia*s of some sort.[45]

All were made entirely of iron, and are 'straight', with a long, triangular-sectioned blade. On other *rhomphaia*s, the blade is straight nearly to the point, where it curves inwards. The blade is very narrow, only 2.5cm wide and single-edged. The long, straight point means that it could be used as a thrusting weapon as well as for cutting, and it should be thought of as being more like the medieval English bill, or the Japanese Naginata, rather than like a Huscarl /Viking longhandled two-handed axe.

It is likely that the men armed with *rhomphaia*s continued to carry javelins as well, using whichever weapon suited the situation best. Although it would have been difficult to throw a javelin, sling your shield, then follow up with a chop from a *rhomphaia*, it could be done. Livy describes Roman skirmishers doing something similar in 189BC:

> This class of soldier has a three-foot shield and carries in his right hand javelins which he uses at long range; he has a 'Spanish' sword at his belt, and if he has to fight in close combat, he transfers his javelins to the left hand and draws his sword.[46]

In addition, Valerius Flaccus describes the Bastarnae using a *rhomphaia* with a javelin and shield (see below).

Between the blade and the handle, there is a hole, in which a bronze ring with internal diameter of about 2cm is inserted. This ring is the key to using the *rhomphaia* with javelins and a shield. Previously it was thought that the ring was used for hanging the sword on a strap, so it could be slung over the shoulder like a Second World War rifle. Yet, it would not be possible to carry it that way as there is no corresponding hole on which to attach the other end of the strap.

In a grave near the village of Tsar Kaloyan, the sword was placed on the right side of the skeleton, pointing downwards towards the feet, the upper part of the handle being level with the head. This could mean that the sword was carried on the right shoulder, though in that case it would be the other way up. It could also imply that it was carried point downwards,

slung across the back, or over the right shoulder. That would mean there was a small ring or other attachment right at the end of the handle (now rusted away), allowing a strap to link the end of the handle with the ring in the centre. A sword from a grave at Razlog was found in much the same position: leaning on the right shoulder of the dead man. In another of these graves, from Pletena, dated to between the end of the fourth and the beginning of the third century BC, the *rhomphaia* was found in fragments (it was later restored). Found with the *rhomphaia* were a bronze, full-face, bearded Thracian helmet; two undecorated bronze greaves; and three bronze torcs.[47] The greaves and the location of the blades accord marvellously with Plutarch's description at the Battle of Pydna (168BC):

> First marched the Thracians, who he [Nasica] himself tells us, inspired him with the most terror; they were of great stature, with bright and glittering shields and black frocks under them, their legs armed with greaves, and they brandished as they moved straight and heavily ironed *rumpia* over their right shoulders.[48]

Modern re-enactors say that carrying a very long sword strapped to your back is uncomfortable, possibly dangerous, severely restricts movement, and makes the sword difficult to retrieve when needed. It makes slinging a shield on your back at least a very clumsy affair, if not impossible. They suggest that the ring is a finger-guard, used to protect your fingers from an opponent's blade as it slides down your own. A finger-guard is a common feature on other long blades. Then again, a 2cm hole is only big enough for one finger (even a thumb wouldn't fit), so perhaps this wasn't how it was used.

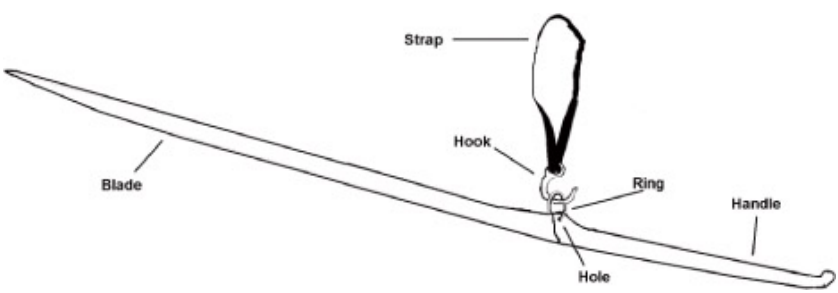


Fig.19. Rhompaia with likely arrangement of carrying strap.

This enigma has now been solved by the Bulgarian conservator and restoration wizard, Georgi Iliev. Georgi made a replica of a *rhomphaia*

found in Kabyle, which the author saw in his workshop at the Jambol History Museum in 2008. The replica was made for a History Channel documentary. He put a ring through the hole and attached a leather thong to the ring with a hook. He hung the leather thong around his neck. In this configuration, the weapon is easily carried, is well balanced, and is ready for instant use, as it can quickly be unhooked. It turns out that the ring is at the centre of balance, and only one hand is needed to hold it this way. He said that it would be easy to carry a shield in the left hand while the weapon is hung from the neck, as very little guidance from the other hand is needed.



Fig. 20. Warriors from the Kazanluk Tomb corridor paintings.

These swords are evidence of the great metalworking skill of the Thracians. The swords were produced locally in an independent craftsman's centre. As indicated above, more than two-thirds of the finds were discovered in the region inhabited by the Bessi, who were famous iron-ore miners at that time. It is not known what proportion of Thracian infantry were armed with the *rhomphaia*, but roughly half the peltasts in the Kazanluk paintings are armed with *rhomphaia*-like weapons. The presence of the torcs and the ritual 'killing' – twisting and burning – of two of the blades is evidence of Celtic influence on the later Thracians – or perhaps those particular blades may even have belonged to Bastarnae warriors.

The *Rhomphaia:* Literary Evidence

The first recorded use of this weapon may be at the Battle of the Hydaspes (326BC), when Curtius says:

> Then Alexander sent the Agrianians and Thracian light-armed against the elephants, for they were better at skirmishing than fighting at close quarters. These released a thick barrage of missiles on both elephants

> and drivers, and the phalanx also proceeded to exert relentless pressure on the frightened animals. Some, however, pursued the elephants too energetically, provoking them to turn on them by the wounds they inflicted … So the fortunes of battle kept shifting, with the Macedonians alternately chasing and fleeing from the elephants, and the contest dragged on inconclusively till late in the day. Then the Macedonians began to use axes – they had equipped themselves with such implements in advance – to hack off the elephant's feet, and they also chopped at the trunks of the animals with gently curving, sickle-like swords called *kopides*. In their fear not just of dying, but of suffering novel kinds of torment as they fled, they left nothing untried.[49]

The word translated as 'axe' is *securis;* while the word translated as 'sickle' is *falx*.[50] The *falx* was very similar to the *rhomphaia*, so perhaps this is a reference to the latter. *Kopides* could be another way of spelling *kopis*, i.e. the *machaira*, a curved sword. However, the *kopis* is sharply curved, not 'gently curving'. It is also a common weapon that would not have to be prepared in advance or be worthy of special mention. The *rhomphaia is* only slightly curved, and the names *rhomphaia, kopis*, and *machaira* are used interchangeably in some texts. A *rhomphaia* would be a much better weapon for chopping at elephants than a *kopis*. If Archibald is correct, then some weapons were left in the baggage until needed, and the ungainly *rhomphaia* would be one of these weapons, so it would need some forethought to use it. Curtius is not a very reliable source, and the passage says that it was the Macedonians who were wielding this weapon, but it seems likely that the *rhomphaia* was used here.

The first definite use is when Livy recorded it in Thracian use in the skirmishes before the Battle of Cynoscephalae. The Macedonians and Thracians crossed over from Illyria to Macedonia through the Eordea Pass in 200BC. They came off badly in an encounter with Roman troops in the forested area around the river Erigon (Black River). The Thracians were hindered by the enormous length of their *rumpia:*

> There was much wooded country around the pass, and this put the Macedonian phalanx at an immense disadvantage; for the formation is quite useless where it could not thrust its long spears in front of the shields to form a kind of palisade, and for this it needed open country. The Thracians were hindered by their lances [the word translated here is *rumpia*], of a similarly enormous length, among the branches that

projected on all sides.[51]

Clearly the *rumpia/rhomphaia* was much longer than the average *kopis*, which would be easy to wield in a wood. Next, according to Livy, at the Kallinikos skirmish in 171, Perseus' Thracians used it successfully to hamstring horses.

> First of all the Thracians, like beasts of prey long held behind bars, charged so vigorously with a great shout upon the Roman right wing, the Italian cavalry, that this people, courageous by nature and through experience in war, was thrown into confusion…* spears to attack the infantry, now to cut off the horses' legs, now to pierce their loins, Perseus charging in the centre of the line, thrust back the Greeks [Aetolian cavalry] with his first attack.[52]

The "*" marks a lacuna, or break in the text; Sekunda[53] says that that some editors have restored the words *phalanx* and *rumpiis* in the passage, which would make the *rumpiae* both cut off the legs of the horses as well as stab in the loins: 'equorumque i nunc succidere crura rumpis nunc ilia suffodere.' The Thracians returned from this battle bearing severed Roman heads as trophies upon their *rhomphaia*s.

> After the victors returned to the camp, all indeed rejoiced, but above the others the swaggering joy of the Thracians was conspicuous; for they returned bearing with songs the heads of their enemies impaled on spears [*rumpiis*].[54]

Next Aulus Gellius in his *Attic Nights* suggests that the 2,000 Thracian and Macedonian baggage guards at the Battle of Magnesia (190) were armed with *rhomphaia*s:[55]

> The *rumpia* too is a kind of weapon of the Thracian people, and the word occurs in the fourteenth book of the Annals of Quintus Ennius [*Annals*, 390]

According to Sekunda,[56] this book of Ennius deals with the Battle of Magnesia, where the Thracians held off an attack by the victorious Seleukid right flank. As indicated above,[57] the *rhomphaia* is next mentioned in battle twenty-two years later at Pydna, by Plutarch.

In the *Argonautica* Valerius Flaccus says that the iron blade was the

same length as the wooden haft, which agrees with the archaeological evidence:[58]

> But where the intermingled footmen keep pace with Sidonian reins, thence Aea draws to her the sworn Bastarnae, whom, Teutagonus at their head, a barrier of raw bark arms, and an even-balanced spear [*rumpia*], not shorter in steel or stem [literally, wood]. Hard by with twin javelins doth he strike his white targes who with an axe digs out the surface of wintry Novas and frozen Alazon …[59]

The original Latin from 96-99 reads:

> …illinc iuratos in se trahit Aea Batarnas, quos, duce Teutagono, crudi mora corticis armat aequaque nec ferro breuior nec rumpia ligno. Nec procul albentes gemina ferit aclyde parmas, …

A note from another edition reads: 'ferrum et lignum rumpiae eiusdem sunt longitudinis.'

Together, these statements rule out alternative explanations for the *rhomphaia* such as the *kopis* or the Celtic sword. It makes the *rhomphaia* look as though it is very similar to the *falx*, but the frequent references to the *rhomphaia* as a sword imply some resemblance to a sword. The weapon described by Kolev is the only one that fits the bill.

The homeland of the Bastarnae was just east of the Carpathians,[60] but they were often in contact with the Thracians. For instance, in 179BC they attempted to march across Thrace to Macedonia,[61] and in 61BC they joined the Getai in defending the Black Sea coastal cities. Strabo notes that in his time they also 'mingled with the Thracians' as well as some Celtic tribes.[62] So although this passage places the *rhomphaia* a long way from the territory of the Bessi, the Bastarnae could have known about it. Whether they borrowed it from the Thracians or the Dacians, it is inconceivable that the intervening Dacians did not know of the weapon.

The 'barrier of raw bark' or *'mora'* is most likely a shield. Flaccus suggests that the Bastarnae carried twin javelins and a white shield as well as a *rhomphaia*, so the Thracians may have done so too. Certainly one of the Kazanluk figures (the central figure of the *dromos* eastern frieze) appears to be carrying two javelins and a shield in the left hand and a *rhomphaia* (or another long, curved blade) in the other.

Also, a year after the Battle of Magnesia, the Thracians in the Roman army (given the proximity of Galatia to Magnesia they were presumably the same ones that were at Magnesia) are reported to have led the Roman

army up a steep slope against the Galatians. The Thracians' armament is not described but they are listed separately from skirmishers, archers, and Trallians (who were slingers). The skirmishers are said to have been armed with a large 'Spanish' sword, javelins, and a large shield, so the Thracians were presumably different. The battle was a Roman victory due to the variety of their weapons and the hail of missiles they were able to throw at the Galatians. The prolonged exchange of missiles (including javelins, which are specifically mentioned) and the Thracian position with the other skirmishers means that the Thracians were armed with javelins. The fact that they are not lumped in with the other skirmishers means that they were also armed with something different, i.e. the *rhomphaia*.[63]

The *Argonautica* was written in the latter half of the first century AD, probably in Vespasian's reign, which would place this account as the last-mentioned use of this weapon by the Thracians or their allies. It is not mentioned again until the Byzantines took to using a weapon of the same name.

Apart from the confusing biblical references, when the *rhomphaia* is akin to the mouth of God, there are two other literary references to the *rhomphaia*. The first is from Hesychius,[64] where Hesychius also tells us that the *rhomphaia* was peculiarly a Thracian weapon:

> ρομψαια. [*romphaia*] θραχιον αμυντηριον, μαχαιρα, [*machiara*] ειφοζ, η αχοντιον μαχρον.

The second is from Claudian:

> Feriat Percutiat velut coelitus. Alludit Historiam qua Angelus Assyriorum centum octoginta quinque milla uma nocte perimit. 4. Regnum XIX. Rhompaea] Notat Rhomphaea omnem vim bellicam, et majorem gladium Barth. 10. Romanque regant] "rhomphaea ultrix feriat[65]

The *Rhomphaia:* Reconstructions

There are currently no more than six Thracian re-enactors in the world. Three reconstructions of the *rhomphaia* are known: one from Bulgaria (the best, described above), one from Germany, and one from the USA (plus two or three *falx* reconstructions). The German one is unsophisticated and resembles one of the *proto-rhomphaia* blades seen all over Bulgaria or a *falx*. It belongs to Marco Gruen.

The magnificent but inaccurate American blade was made by Kirby Wise in 2005 for an American re-enactor. There is an engraving on the

blade. It was hand-forged from one piece of spring steel, tempered using traditional methods. It weighs approximately 3lb. The dimensions were based on an actual blade (mentioned above) owned by an American collector, John Piscopo (now deceased). The total length of the replica is 65in. The shank is 20in and it is slightly rounded for better holding. The owner wrapped it with flat leather cord. The 4in, two-piece bone 'grip' is riveted like the original. Apparently some records say the grip material was wood, bone or horn. So it was decided bone would make a good contrast. The blade is slightly curved inward but not enough to prevent it from being used in a thrusting manner and the owner honed the inside edge quite sharp. Unfortunately it was decided to ignore the evidence for a finger guard or hole for a carrying strap, so none is included. It was felt that a scabbard makes far more sense for carrying purposes and storage, especially as it is so sharp. It was made so it can be carried across the back.

It was wrapped in leather to give it better grip and handling, and less slippage from blood, water or heat. There is no evidence for this but it works well and none of the non-ferrous components have survived on any of the surviving specimens, so it could have been done. Tests of the blade by people familiar with two-handed swords found it to be very effective. It is extremely quick and well balanced.

Similar Weapons: the *Harpe, Falx* and *Dorudrepanon*

The *rhomphaia* was a much-feared weapon, as it could cut off a limb with a single blow. The passage from the *Argonautica* above denotes the use of the *rhomphaia* very close to the time when the Dacian *falx* (war scythe, plural *falces*) is depicted on Roman monuments. Roman troops in Dacia were issued with special armour for their arms to combat the terrible effects of the Dacian *falx*, which was similar but had a wider, much more curved blade, and a wholly wooden handle.[66] For example, all the blades displayed at a Romanian exhibition in Florence were blades only, with lengths of 22.5, 35, 30, and 24.4cm. Only one blade from the two-handed version has survived; this can be seen in Cluj Napoca museum, Romania. The Dacian *falces* wielded on the Adamclisi reliefs and on Trajan's Column also show wholly wooden handles. They are also in at least two types - the small one-handed sword/knife, and the larger two-handed version. Roman coins minted after the Dacian conquest show a few of the emperor's personal bodyguard were armed with *falces* (called *rhomphaia*s in official documents). On the coins they can be seen watching the crowd, while all other troops face the emperor. This indicates that terror of the weapon was much greater than the numbers used, and helped to keep crowds in order.

This also explains why it should be used as a symbol of authority.



Fig.21. Dacian or Bastarnae warrior wielding a falx gets stabbed in the back by a Roman auxiliary, from the Adamclissi monument.

Greek pottery sometimes shows the *harpe*. This is a small, sharply curved blade used for sacred and ceremonial purposes. It is much too short and curved to be confused with the *rhomphaia*.

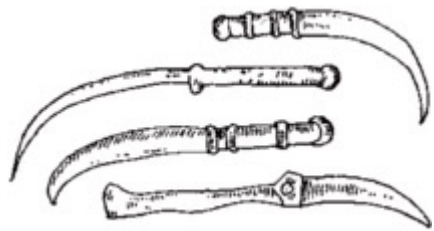


Fig.22. Different types of falx; there were one and two-handed versions.

Nick Sekunda has previously identified the *rhomphaia* with a spear-pointed sickle, the *dorudrepanon*. This may have been a type of boathook, as it is chiefly mentioned in naval actions, when its long reach and hook-like blade would have been handy. This was in limited use in Asia Minor, and is shown with Phrygian troops on a couple of Greek vases. Sekunda wrote before the Bulgarian evidence was widely known, and that evidence shows the *dorudrepanon* was a different weapon. It had a wooden handle and a spear point as well as a curved blade, like a halberd. Sekunda and others have also identified the *rhomphaia* with the *drepanon*, a curved sword from Lycia.[67] Again, the *drepanon* cannot be the same weapon as the *rhomphaia* because it is definitely a sword or a war sickle, with a very pronounced curve to the blade.

These Asian similarities raise the question of the origin of the *rhomphaia*. The Hittites had a similar weapon that is shown on carvings at Yazilikaya near their former capital at Boghazkoy.[68] This was relatively close to Thrace, at a time when Thracians were active in Bithynia and the Troad, and although the Hittite empire disappeared a thousand or more years before the appearance of the *rhomphaia*, some memory may have been retained in weapons such as the *drepanon* and *dorudrepanon*.

It is much more likely that a local Thracian independently came up with the idea of making the progressively longer Thracian curved swords into a two-handed weapon. It may be no coincidence that the *rhomphaia* makes its first appearance on Thracian battlefields at about the same time as the *thureos/scutum* full-body-length shield – the longer reach and curved blade being needed to get over or under the shield. If that wasn't effective, then a two-handed blow from a *rhomphaia* might break the shield or knock it from its owner's arm. Experiments with a replica *falx* (wielded by a suitably semi-naked barbarian) and Roman shield have shown this to be a real possibility.[69]

Spears and Javelins

There are references in Greek texts to 'Thracian spears,'[70] but these are unfortunately not further described. Most warrior burials contained multiple spearheads with blades of varying lengths. The principal forms were derived from older Iron Age types, though the total length is often equal to or smaller than the blades of their early predecessors. Two examples of bronze spearheads dating from the late Bronze Age, (1500-1200BC), come from Dolno-Levski, near Panagyurishte, and Sarantsi, Sofia district. Their lengths were 19.2cm, and 29.1cm respectively. In March 2007 a bronze spearhead dating from about the same time (which included the Trojan War) was found in the Perperikon area. The larger spearheads may have been from a long spear rather than a javelin, as Homer says the body of the Thracian hero Peiros was defended by Thracians with long spears.[71]



Fig.23. Two men in Thracian costume, each with a pair of spears, from a red-figure amphora, c. 475–425BC.

Sixth-century and later examples tend to be much shorter and narrower. Javelin heads tended to be smaller, thinner, and longer than other spearheads, though often there is no difference. Some javelin heads were obviously specifically designed for throwing rather than used in hand-to-hand combat.

Three principal shapes were in use between the fifth and third centuries BC. The straight-sided type had a pronounced midrib, the blade base jutting sharply away from the socket. This was the commonest form used by the Getai. With the leaf-shaped type, the blade base curved smoothly into the socket. The third type was the barbed Skythian type of javelin head. The number and range of types increased in the later fourth and during the third century.[72]

Although Thracian warriors are often painted with a single javelin, it is generally accepted that they carried two or more of these weapons. For instance, around 516BC some Dolonci nobles walked past Miltiades' door in Athens, 'which caused him to remark them, dressed as they were in outlandish garments, and armed moreover with spears.'[73]

Peltasts are always illustrated with only one or two javelins, but it is clear from battle accounts a bundle of javelins was carried, the number depending on their length (between 1.1m and 2m).[74]The weight of the javelin would have been around 0.6kg. To make javelin throwing easier, Thracian peltasts may have pulled up (and tied around the waist) their colourful cape and tunic. This also gave them more freedom of movement.

The javelins were thrown in a very special way that enabled the peltast to throw them further, beyond the usual 35-60m. He held the javelin lightly with his fourth and fifth finger, while the second and third fingers were hooked around a leather loop (*vronchos* or *amentum*) that was attached to the javelin. When the javelin was above his head he released it and gave it

a final swing with the strap. The theory is that about half the spear's velocity comes from the final wrist flick and this strap increased the spear's thrown speed. The spin imparted to it by the final twist made it more accurate.

In practice, experiments suggest:

(a) that in war the Greek javelin was thrown with a fixed thong to secure increased range, without any twist to add spin;
(b) that the athletic javelin was thrown with a free thong primarily to produce spin in order to ensure pitching on the point.[75]

The javelin apparently wasn't expected to be terribly accurate.

> Our only piece of evidence of the degree of accuracy achieved by the Greeks with the thong appears to be the incident recorded by Polybios as proof of the skill of Ptolemy Epiphanes. Once while hunting he hit a bull with a javelin from horseback.[76]

The Olympic record for a javelin thrown without assistance is 104.8m, with a 0.8kg javelin, but at such a range a javelin is unlikely to be accurate or penetrate armour. In the experiments made by General Reffye for the Emperor Napoleon III it was found that a javelin, which could be thrown only 20m by hand, could be thrown 80m with the *amentum*. In another experiment an inexperienced thrower increased his throw from 25 to 65m. Neither experimenter appears ever to have thrown a javelin himself, with or without a thong. Experiments with a modern javelin showed a four to six per cent improvement on average, with the best improvement being twenty-five per cent and the worst being a sixteen per cent deterioration.[77] It is unlikely it was as efficient as a wooden spear thrower used by other cultures (e.g. the Australian aborigines' *woomera*) which allowed a spear to be thrown up to 180m.[78] These throw the spear right from the end and gain maximum leverage. The longest throws in modern competition have been obtained by throwing a javelin underarm like a discus (the 'Spanish throw'), but this has been banned, as it is dangerously inaccurate. Harris concludes that the longest throw using ancient methods was about 100m.[79]

The use of the long spear by Thracian peltasts has been discussed in a previous chapter. The long spear was different from the javelin not only in its size, but also because it had a bronze *sauroter* (butt spike). This allowed the spear to be stuck into the ground when not needed, acted as a counterweight, and could be used as a substitute for the spearhead if the

spear broke. It consisted of a single piece of bronze cast to include a hollow socket sized to fit onto the spear, and a cylindrical or conical point. Those with a four-sided pyramidal point could penetrate armour more easily – in hoplite battles it is thought that the second rank used the reverse end of their spears to kill wounded or fallen opponents. Objects of such shape have been found in Bashova Mogila, Pleven; in Greece; on the territory of the lower and middle course of the Dnieper River; and in Crimean Skythia.[80] This *sauroter* is often hard to see on Greek vase paintings of Thracians (the full length of the spear doesn't fit), but is easily visible on the Alexandrovo paintings.

Axes

Some of the earliest known bronze weapons were axes, which imitated the very narrow style of the copper axes that had preceded them. For instance the early Bronze Age Dubene-Sarovka flange axe was produced in the first half of the third millennium BC. Dubene is in central southern Bulgaria. The length of the axe blade is 17cm, the maximum width is 4cm, and the maximum thickness is 2.6cm.[81] The axe has flanges on both sides, so that it has an 'H'-shaped profile when looking down the blade. It is characterized by a slightly trapezoidal body with narrow ends and oval profile, as well as by slightly inverted prolonged edges. They were multipurpose items, being used for peaceful activities such as cutting wood and other household activities (for instance, butchering). In addition, they also had functions such as a prestige sign and an effective weapon. This type of single-headed axe was quite common at that time, though only the richest people would have been able to afford bronze weapons. Flat and flange axes were very important social prestige signs, being found with gold jewellery, and daggers in several instances. Not many flange axes were discovered in the Balkans, in comparison to Western Europe, because of the popularity of the shaft-hole axes.[82]

The two-headed axe, or *labrys*, can be found on Thracian coins and incised or painted on Thracian tombs from 1000BC right up to the Hellenistic era.[83] It has been found in purely ceremonial and practical forms – copper axe-heads are relatively common at Chalcolithic sites. Its symbology is extremely ancient – gold and stone axe-sceptres dating from the end of the fifth millennium BC were found in theVarna necropolis.[84] The copper axe-heads are usually the single-headed, narrow-bladed common type seen elsewhere. They are about 11–14cm long, 5cm wide, and weigh about 550g. A similar axe was carried by the famous Alpine 'ice man' Oetzi, this being the only axe from that time that survives with its

haft. In this case, the carefully smoothed handle is 60cm long, and is slightly bent. The blades for these axes were cast in two-part moulds, and one of these moulds has been found in Pobiti Kamani, dated from around the sixteenth to the eleventh century BC.[85]

The axe seems to have been popular, especially as a royal symbol. Plutarch says[86] it was a Lydian symbol of kingship, and it was certainly a symbol of Thracian kingship. It is usually found in the two-headed form, the *labrys* (the name *labrys* comes from the Lydian word for 'axe'). In the Near East and other parts of the region they are often wielded by male divinities and appear to be symbols of the thunderbolt. A naked male figure on the Alexandrovo tomb paintings wields such an axe over his head – he is thought to represent Zalmoxis. The double-bladed axe is most closely associated with the Minoans, around the second millennium BC. This is another indication of the strong link between the better-known Bronze Age cultures and the Thracians. The axe is so frequently found in late Bronze Age sites, especially north of the Danube, that it must have played a significant role in Thracian warfare of the time. It is unlikely that the Thracians used axes in battle after the Bronze Age, as Thracian warriors are not mentioned as using them in texts, or shown using them on pottery or in tomb paintings. The axe continued as an ancient symbol of power just like the sword does for modern monarchs. For instance, the British monarch has a sword of state, but the British army only uses swords for ceremonial purposes. A fourth-century red-figure vase depicts the mythical Thracian king Lycurgus using a *labrys* against Amazons.

A single example of a third style of axe has also been found. This is the 'anchor' type, and was found with the thin-bladed type in a middle Bronze Age treasure from the Haskovo region. This 'D'-shaped axe has three attachment points to its haft, with empty spaces in between. It is similar to one found in Anatolia, dated to 1750BC.[87] This axe has a thinner and more fragile blade than the other types, so perhaps it was more common, but has not survived in equal numbers. Alternatively, it may have only been used for sacred and ceremonial purposes. Other types of axe were in use in northern Thrace at this time. Disk-butted battleaxes are prominent in the late Bronze Age hoards from Transylvania. They were rarely decorated but often had an unpleasant spike at the centre of the disc.[88]

There are only two possible examples of an Iron Age Thracian battleaxe: one found at the Getic capital of Helis, and another found in Tumulus 3 at Kralevo, Turgovishte County (now in the Republic of Macedonia) and now in the National Historical Museum. It consists of a

single piece of iron including a wide blade, ring to attach the wooden handle, and a ribbed counterweight. It has been called a battleaxe by its finders, and although is quite different in appearance from the more common chisel-like Skythian *sagaris*, it is similar to other Skythian axes. The official report says that the Helis axe is like the Kralevo axe, which is dated to the first half of the third century BC.[89] Due to the rarity of this find it is possible the axe has a ceremonial purpose, or indicates the presence of non-Thracian mercenaries.

Catapults

In Helis, the Getic capital, catapult bolts and stone ball ammunition have been found in an arsenal on the ground floor of the south wall. This wall is presumed to have been constructed to protect against attack from the south, where a hill suitable for siege devices is situated. Sometime during 280–270BC, 60m of the south wall, west of the south gate, was widened to 9m. The most likely explanation for the widening of this wall is that it was to provide artillery platforms (in one or two stories) to counter the besieger's siege weapons on the hill.[90] Two of the catapult bolts were found in the interior of the fortification, in a room under the collapsed eastern wall, which means they must have originated there.

The authors of the report on these weapons say that the fact that one of the larger arrowheads found has a broken point and that it comes from the centre of the site (a long way from the walls) indicates that it was shot by a *gastraphetes* (a belly bow). They say that other arrow-shaped objects, because of their dimensions and solid tips, are not arrows but catapult bolts. They say that the bolts are different sizes, designed for three types of catapults – *gastraphetes, oxybeles* (where the bow is mounted on a frame and pulled back with a ratchet), and *euthytonon* (the torsion catapult). The bolts with smaller arrowheads have a length of three to five spans (~110cm), and needed three men to shoot them. The larger bolts probably come from a three-elbow engine, which was served by five men. They are considerably longer, have a larger diameter, and are much heavier. One of these bolts was found in the dwelling complex on the southern slopes and is thought to have been shot from the hill to the southeast. Perfectly cut stone balls of one *mina* (436g) weight have also been found, these being suitable for a small calibre *lithobolos* (vertical torsion-powered stone thrower).[91]

Bows and Arrows

Arrowheads

Virgil suggests[92] that Thracian arrows were considered the best of their kind. Arrowheads with a solid pyramidal tip and long tang connecting to the wooden sheave emerged in the Aegean basis at the end of the late Bronze Age as a result of attempts to enhance the armour-piercing capability of the arrows. Getic sites have produced numerous small bronze three-edged, three-sided arrowheads with barbed or straight ends, the same style as Skythian arrowheads. At Helis, arrows were amongst the most numerous weapons found. Three of the arrowheads found there had deformed tips, indicating the power of the bows that shot them from outside, which were presumably composite bows.[93] In Rozovets and in three other tombs in central Thrace, up to 500 bronze arrowheads were found, some still attached to wooden shafts. Small, bronze, socketed arrowheads with three barbs found at Olynthos and elsewhere, may be Thracian. Many Thracian tombs contain large caches of tiny bronze arrowheads that would be of little practical use and it is thought that they were a form of currency. For example, the Svetitsata tomb contained 144 of these tiny arrowheads, which are about 2cm long and 0.5cm wide.[94]

Nearly all depictions of Thracian bows show them to be the recurved composite Skythian type. Euripides also says the Thracian bow was 'horn-tipped'.[95] Material from Getic sites shows that bows were a royal symbol, though whether this can be extended to all Thracians is not so certain. Bows were not popular among the other Thracians, as their use is mainly portrayed during royal hunts, they are rarely mentioned in texts, and arrowheads are found in only a few tombs. Among the northern Thracians, the bow was a symbol of royalty, and was used for hunting, but it was only rarely used in battle by the other tribes.

Slings and Staff-Slings

Pritchett[96] says that hundreds of sling bolts have been found in Greek Thrace or nearby, at Olynthos, Torone, Amphipolis, and Ofana (east of the Strymon). A large number of sling bullets have also been found on a site (Kirklareli) in Turkish Thrace.[97] Hellenistic Thracians may have used staff-slings, as stone balls large enough to have been fired with a staff-sling (but too small for a catapult) have been found at Helis.[98]

Bullets found in Thrace are generally heavier than those from other locations, described below. It would have been easy to throw such missiles from a high wall or tower.

Slings were apparently very popular in Thracian sieges. Nearly 200 sling missiles have been discovered inside, and in front of, Hellenistic (late fourth to first century BC) Thracian sanctuaries, settlements and strongholds

all over Bulgaria. This includes 104 sling bullets that have been found at a site near Pernik, possibly in Agrianian territory.[99] It has been shown mathematically that slings are at their most effective with a large projectile thrown from a height, or with the highest possible trajectory, so perhaps this is why slingers were used when defending walls.[100] Even a ten-degree slope doubled the impact energy of the falling stones.[101]

Table 1: Sling Bolts from Thrace: average sizes and Weights (source: Paunov & dimitrov, 2000)

Location	*Length (mm)*	*Width(mm)*	*Thickness (mm)*	*Weight (g)*
Village of Dubrava, region of Gotse Delchev	28–30	21	13	30–33
Village of Mukhtarovo, region of Petrich	46–48	23	20	102 and 104
Village of Sesmino, region of Petrich	39	–	diam. 16–20	74
Village of Lashkarevo, municipality of Sandanski	38–45	–	diam. 11–22	21, 43, 44; two of 45 each; three of 49, and three of 59.
Village of Palat, region of Blagoevgrad				
1. Biconical almond-like shape	35	18	14	39
2. Almond-like shape with elongated ends.	32	15	17	38
Village of Ilindentsi, region of Sandanski	36	17	15	39
Village of Noevtsi, region of Pernik	33–37	–	diam. 11–19	35–45
Village of Vrazhya Stena, region of Pernik	32	–	17	40.4

The Thracian slinger would have shot lead, ceramic, or stone projectiles, depending upon availability.[102] Smooth river pebbles or almond-shaped lead bullets were preferred. The lead bullet could increase

range by up to fifty per cent, depending on the skill of the user.[103] Hardened clay missiles were more popular in the Stone Age, and large numbers have been found in the layers of Neolithic and Eneolithic (i.e. Chalcolithic) tells in many sites in Bulgaria (for example: Gulubnik, Sapareva Banya, Slatino – all southwestern Bulgaria; Novi Pazar, Smyadovo – northeastern Bulgaria).[104] Clay bullets were also used if lead wasn't available – five bullets found at Helis had similar shape and dimensions to lead bullets.[105] In most cases the lead or clay shot was probably made on site, as lead bullets for guns often were until the nineteenth century.

Thirty-five of the bullets bear seven types of symbols and inscriptions in Greek and Latin. Some inscriptions are probably the names of their commanders, and marked different units of the slingers. Others bear words like 'pain.' Some bear witness to historical events. For instance, two large identical missiles from a hill thought to be the site of the Maidi capital town of Petra/Iamphorynna may be from Philip V's successful campaign against the Maidi, in 181BC.[106] The site is near the village of Muletarovo in the middle Struma valley.

Slingers were mostly found in areas where proper-sized stones and pebbles were readily available.[107] Slings were used by shepherds and other poor men at the bottom of the social ladder who had nothing to their name other than the clothes on their back. It was the cheapest possible weapon, was easy to make, and its ammunition was plentiful and free. Although no Thracian slings have been found, we can describe them, as the weapon was so simple it was usually made the same way. It consisted of a cord about 1-1.5m long, woven from goat's hair, horsehair, or wool.[108] Slings of twisted sheep's wool are mentioned twice in the *Iliad*,[109] but a leather thong or a string of sinew could also be used. There was a plaited pocket reinforced with cloth or leather in the centre, to hold the projectiles. This could be 'strengthened with numerous seams.'[110] One end of the cord ended in a loop that was fastened around the slinger's wrist or forefinger, while the other end had a knot that was held between thumb and forefinger. The loop could also be reinforced with leather, and was used to hold onto the sling when the other end was let fly.[111]

A sling is to some extent made to fit its user for, if the vertical shooting method is used, the sling must not touch the ground when being whirled around. That is, it must be about long enough for the pocket to touch the ground when your arm is relaxed and hanging down. The cord could be longer if it was whirled above the head horizontally. Objects travel faster closer to the centre of a circle, and the faster the projectile is moving when you let it fly; the more energy there is in the projectile. With the shorter

sling, the stone is closer to the centre of the circle when whirled. Some slingers can get the speed they want with a shorter sling and a single revolution, while others want a longer one, and an extra revolution.[112] The longer sling is harder to control because it trails further behind the throwing wrist and thus it is harder to 'feel' where the pocket is at the time of release. Its advantage is that it allows a longer range. Shorter ones were more accurate. Slings also varied in length according to circumstances, the shorter ones being used in the assault upon besieged towns (stones weighing up to 500g were used), and the longer to wound an enemy from a distant eminence; for the projection of large stones they were constructed with two, three, or more cords.[113] Balearic slingers usually carried with them three cords of different lengths, to serve either as bands or as slings; one of these was bound round the head, the second round the waist, and the third was carried in the hand. Carrying a spare sling was necessary because slings do break and the pieces can carry some distance.[114]

Slinging technique is a much-debated subject. Underhand (vertically) and overhand (horizontally, above the head) techniques are the two basic divisions of throwing with underhand being the more powerful, but typically more difficult to master in terms of accuracy.[115] The method used seems to be a matter of personal preference. Either way the sling probably had a flatter trajectory than a bow, which probably improved its effectiveness against armour, since it was more likely to hit a standing man closer to a ninety-degree angle. Thus slingers in large groups had to be extra careful, lest they hit friends in front of them.

Perhaps this was the major disadvantage of a sling – the space needed to shoot it. You need slightly more space than the distance of the cord in front of, and behind, the slinger (plus the length of his arm) in order for the weapon to be shot safely. With a one metre sling, there would have to be a minimum distance of three metres between each slinger to avoid fouling each other's sling or injuring another slinger.[116] A bowman can get by with just the length of his arm in free space in front of him, and an arrow is usually shot upwards, on a ballistic path. He can also shoot his weapon more quickly (at least until he gets tired). There was also a relative shortage of shepherds (compared to tribesmen with hunting experience), and the need for skilled operators to get the best range and accuracy. Sling techniques must be practised until instinctive. There is no time to consciously judge the point of release. Some people will learn to use a sling accurately with relative ease; most will require a lot of practice. The sling is a difficult weapon to learn to use properly.[117] Also, a strong breeze twists and twirls the empty sling, making reloading slow and difficult. Arrows

have the added advantage, if they strike a person, of being difficult to pull out due to the barbed tips. When compared to the smaller sling ammunition required to get a reasonable range, arrows did more damage.

An arrow shot on a parabolic arc does not lose much speed/force due to distance (it suffers little from drag and at longer distances is fired on a parabolic arc). A sling-stone would suffer from drag due to its shape. The difference in the effects of slings and arrows are as follows:

Table 2: Sling and arrow effects.

Weapon	*Weight (g)*	*Impact Area*	*Area of WoundImpact Energy*
Arrow	35.83	1/32in (0.08cm)	2.0in (5.04cm) 64.27nm
Sling	32.4	¾in (1.89cm)	1.2in (3.02cm) 21.70nm[118]

By comparison, a baseball weighs 142g/5oz.

Although they did penetrate unprotected skin and tissue like modern bullets, sling missiles did not have to penetrate armour to do serious damage to the unfortunate target of their wrath. They caused concussive damage and could behave like an anti-tank HESH (High Explosive Squash Head) round – deforming on impact and causing bits of armour to fly off from the opposite side. Since a helmet was little protection against a slingshot, a head shot was usually deadly. King Philip II was lucky when he lost only an eye to a sling bullet.[119] Biconical sling stones were deadlier than arrows against leather armour.[120] Although a slingshot makes a terrifying whizzing sound, it can't be seen (unlike arrows), and thus is hard to dodge.

It takes an impact energy of about 95 newton metres (nm) to cause a fracture of most bones of the human body, but less than 2.71nm to pierce the human body. A 56.7g projectile travelling at 60m per second will have an impact energy of 111.18nm.[121] Using a sling, speeds of 116mph (208kph) are quite feasible.[122] Balearic and Persian slingers have been recorded shooting one *mina* missiles, which would have been about the size of a tennis ball and weighed either 330g or 450g.[123] The modern Balearic Slingers Federation recommends stones about the size and shape of an egg.[124]

Even lighter sling projectiles have momentum equivalent to modern revolver bullets, and the momentum of heavier sling projectiles exceed those of the two most common military rifle cartridges in use today. In terms of relative stopping power, they are a great deal more effective.

Based on these comparisons of momentum, even the 49.63g projectile would be extremely effective on impact.[125] A direct hit on an unprotected area by a slingshot could easily shatter bones or the face of an unfortunate victim.

The weight of various sling-stones in the Near East has been found to vary between 13g and 185g, with volume varying between 5cc and 65cc, with most being in the range between 20g and 50g.[126] The range was similar in Sicily – between 24g and 46g. The missiles found at Olynthos were only slightly smaller – 18–35g. At Olynthos it was determined that the Macedonian slingshots tended to be at the heavy end of the range. There is no perceptible difference between Greek and Roman bullets as their shape was uniform and their weight similar in the ancient weaponry as a whole.[127]

Slings may have required less effort than a composite bow, which would tire its user after only about a dozen shots, so it was difficult to maintain distance, accuracy or rate of shooting.[128] Experiments indicate that a sustainable rate of one shot per ten seconds is a reasonable value for an inexperienced slinger. An experienced slinger could undoubtedly add a few more shots per minute to that rate. We will conservatively assume a maximum sustainable rate to be seven shots per minute.[129]

Reloading a sling usually requires the use of both hands, but skilled slingers could do it one-handed and carry a shield of some sort (e.g. a *pelte* or a flap of animal skin draped over the left arm). To load using one hand, the sling has to be laid out on the ground, a projectile placed in the pouch and then both ends of the weapon picked up simultaneously.

There are many known instances of extremely accurate sling shots, and head shots were quite possible. These include the biblical stories of David and Goliath, where David appears to have hit Goliath in the only part of the forehead not protected by his helmet. Also, the slingers in the army of Benjamin ‘could not miss by a hair's breadth’.[130] Livy says that the Achaean slingers ‘having been trained to shoot through rings of moderate circumference from long distance … would wound not merely the heads of their enemies but any part of the face at which they might have aimed.’[131] Anneaus Florus remarks that the Balearic slingers were so accurate because they were forced to practice the art from a very young age.[132] Livy, however, says that the Achaean slingers were even more accurate than the Balearics.[133]

The range of the sling has always been a point of contention among enthusiasts and scholars. This is partly caused by the difference between maximum range and effective range – the latter being when a slingshot

could hit hard enough to do some damage. The maximum range at which a slingshot could cause damage to an armoured opponent is usually regarded (by wargamers at least) to be around 120m, but this seems incorrect.[134] Xenophon's account of a hastily organized corps of Rhodian slingers outranging Persian bowmen (with lead shot) after the Battle of Cunaxa would probably involve the use of this weapon against unarmoured opponents. In this case, estimates of the range possible vary from 200–500m, while experiments show ranges of 50–250m.[135] The modern Balearic Sling Federation recommends 200m as the minimum safe distance for bystanders when slings are in use.[136] Polyaenus says that 'the sling was a longer-range weapon than the bow, for Pryaechmes with a sling won a duel with Aeschines who had a bow.'[137] Wallace McLeod says that in the ancient world it was generally regarded that the sling outranged the bow.[138] Dohrenwend suggests 380yds (347.5m) as the maximum effective range.[139]

McLeod says the maximum effective range of a composite bow was between 160 and 350m, with most writers suggesting a range around 200m. Ranges of 532–710m have been achieved with special arrows and bows but these would not be expected under battlefield conditions, nor would the special light arrows necessary have much hitting power. The best ranges attained by wooden self bows were 155–90m. The extreme range of the Cretan bow would be about 175m, with its effective range being much less.[140]

It would seem then that the maximum effective ranges of slings and bows were similar, although bows have a longer maximum range and, as has already been noted, it was necessary to use smaller sling missiles to get longer range, so at the longer ranges the sling did less damage.

Table 3: comparison of Bow and Sling *Effective* Ranges.

Bow	*Sling*
Composite bow: 160-350m	estimates range from 200-500m, while experiments show ranges of 50–250m;
Self bows: 155–90m	Dohrenwend suggests about 347m

Clubs

The club was one of the typical weapons (along with a javelin or dagger) of the poor Greek light infantryman (gymnet or *psiloi*), who had to make do with what he could find.[141] It is no surprise that poor Thracians did the

same thing. In Xenophon's *Anabasis*, the Thynians, armed with clubs, launch an attack on Xenophon's village:

> When they were at the doors of the houses, some hurled javelins at them and others beat at them with clubs with which they were armed, so they said, in order to knock off the heads of the spears.[142]

Clubs are commonly shown on Thracian art; there are at least five examples of clubs being wielded in mythological contexts (probably by Heracles) on Thracian toreutics.

The fourth-century silver jug from the Rogozen treasure (inv. No. 22454)[143] has a scene repeated three times around it, probably of a chase between spear-armed Amazons and a club-armed Heracles. His club is short, stout, and straight and appears to be bound tightly, with three wide horizontal bands.

A late-fourth-century silver headstall (bridle frontlet) from Mramor Mogila, Panagyurishte district (inv. No. 3555), has a relief of a man holding a huge, very knobbly club in his left hand. The club is bent a little, just like a tree branch. He is wearing a chiton that falls below his knees, and pats a lioness with his right hand.[144] This is interpreted as Heracles with the Nemean Lion.

The cheek-piece of a bronze Thracian helmet, village of Gurlo, Pernik district (fifth century BC), bears a relief figure of the young Heracles. He holds a cudgel in his right hand. A lion hide hangs on his left arm, in which he holds his bow. A *gorytos* (quiver) is fixed on his back by a strap across his shoulder. The club is straight and knobbly, with the width thickening evenly as it gets closer to the end.

A fourth-century silver gilt kylix from Kapinovo, Veliko Turnovo district, has a scene where Heracles gives Diomedes a drubbing with his club.[145] Diomedes was the legendary king of the Bistonians and the son of Ares and Cyrene. He was killed by Heracles, who stole his man-eating mares. Heracles wields his huge club downwards over his shoulder while he grips the other, bearded, man's hair in his left hand. The other man ineffectually tries to fend him off. The club is a simple, single, massive piece of wood, thicker at the end than at the handle, and with a wrinkled surface.

Although mostly included as the traditional weapon of Heracles (or an equivalent Thracian hero), the above do show what a Thracian club might have looked like. This is shown by two other, realistic, examples. A thick, knobbly, curved stick brandished by a footman clad in a red-brown *exomis*

is portrayed on the Alexandrovo dome paintings. Given the hunting theme of the frescoes, it has been suggested (by Duncan Head) that it was used for killing hares. The second example is a semi-naked clubman on Trajan's Column (variously identified as an auxiliary or as a Dacian).[146] He carries a large oval shield in his left hand and holds up high a short club in is right hand, ready to bring it down on an unfortunate opponent. He is wearing only long trousers and carries a sword on his left hip.

The knobbly sticks used by the other clubmen make an interesting comparison with two young men carved on the late-fourth-century gold Panagyurishte amphora-rhyton (No. IX, inv. No. 3203).[147] They are obviously not armed with clubs but they are standing with similar (though waist-high, thin and straight) knobbly sticks in their hands. They look more like staffs of office (such as might be used by a priest). The same type of wood is also used by one of the cavalrymen in the Alexandrovo tomb paintings, and for a javelin that lies on the ground at the front of the Alexander mosaic. Most interpretations of the scene on the amphora say that the sticks the two men are holding are in fact clubs, especially that of the older man (identified as Heracles or Oedipus), which is thicker and more substantial than that of the young man (identified as Theseus by Hind).[148]

Unconventional Weapons – Carts and Spiked Axles – The Defence of the Shipka Pass

An unusual Thracian tactic was the use of wagons as a defensive obstacle or as a terror weapon. Arrian describes how in spring 335BC

> a large force of natives under arms and the free Thracians defended a pass in the lower slopes of the Haemus Mountains against Alexander. They had collected large numbers of carts, which they intended to use, if they were hard-pressed, as a sort of defensive palisade, with the further idea of sending them crashing down upon the Macedonian phalanx as the men were climbing the steepest part of the slope.[149]

The wagons were loaded with rocks to make them more effective. Behind the carts were the warriors, women, children, gear, and stores. The infantry banged their weapons and shields together, while dancing, singing, brandishing their *rhomphaia*s, making threatening gestures and hurling taunts at the Macedonians.

When the carts were rolled down the hill, they had little effect, as Alexander's troops either dodged them or hid under their shields as they

rolled over. This story is hard to believe and some say it never happened[150] but Waldemar Heckel suggests that these men were the hypaspists, who were given the more dangerous tasks in difficult terrain and carried larger shields than the pikemen.[151] Minor Markle says simply that they were using hoplite shields.[152] M. Lucullus (governor of Thrace and Macedonia) was attacked by the Bessi using a similar contraption, consisting of wheels fastened together by their axles and studded with short spear points, which were hurled down upon the Romans as they advanced up a steep slope.[153] The Dacians used comparable devices, though in a more developed form.

Chapter 5

The Thracian Army

Thracian Armies – Size and Composition

Although by the beginning of the first century AD Thrace had been devastated to an exceptional degree, Strabo said that Thrace south of the Danube at that time could send into the field 15,000 cavalry and 200,000 infantry.[1] This would corroborate Herodotus' statement that there were about a million Thracians, which allows an army 100–200,000 strong. It also makes credible Thucydides' claim that when the Odrysian king, Sitalkes, called up all Thracian troops south of the Danube, 150,000 warriors poured 'like a cloud of locusts' into Macedonia, carrying all before them.[2] There were at least three Thracian tribes fighting alongside the Trojans – Rhesos had an army so big 'it was beyond one's comprehension; many knights, many ranks of peltasts, many archers, a great crowd of light-armed troops, arrayed in Thracian garb'.[3] No wonder Herodotus says of the Thracians that 'were they under one ruler, or united, they would … be invincible and the strongest nation on earth'.[4]

The Thracian army was organized along tribal lines, with each contingent commanded by their own prince or his relatives. Since the leaders expected to be in the forefront of battle, they would have had little control over their armies once battle was joined. In Sitalkes' case (when fighting the Triballi), this also meant the death of the commander and loss of the battle. Commands were transmitted by trumpet calls.[5] Thracian musicians used horns for giving signals, and also trumpets of raw oxhide that could play music like that of a harp.[6] When mercenary generals were hired, the Thracian king tried to bind the Greek commander directly to him by offering his daughter or a female relative in marriage, and by an

exchange of gifts.[7]

Tribes fought together as well as alone, but large agglomerations were rare. Tribal fragmentation meant that most Thracian armies would have been no more than 10,000 to 30,000 men strong. Three typical armies were: the four tribes (Astii, Caeni, Maduateni, and Coreli) that attacked Romans with 10,000 men in a mountainous defile in 189; the 30,000 Triballi that pillaged the territory of the coastal town of Abdera, and then defeated the Abderan army in 376/5BC; and the Triballi's lone defence against Alexander the Great. Sitalkes' army was an exception. His warriors came from the Odrysai, Getai, eastern Paeonians (Agrianians and Laeaeans), Treres, Tilateans, Apsinthii, Krobyzi, Dii (plus Bessi and other mountain tribes), and Thyni. None of the tribes from the Aegean coast (Edoni, Bisaltai etc.) joined Sitalkes. The most warlike of his infantry were the Dii mountain tribesmen; according to Thucydides the rest of his army was chiefly formidable by its size. This did not stop them and the Illyrians from repeatedly overrunning Macedonia in the first half of the fourth century BC.

Greek mercenaries were occasionally hired to make up for the lack of heavy infantry, making an effective combination. One of the most powerful of the combined-arms forces appeared in 400, when Seuthes II hired the 6,000 or so survivors of Xenophon's army to get his own domain on the Black Sea coast.[8] They were mainly hoplites, but included nearly 1,000 peltasts, javelin-men, and slingers, and 40 cavalry.[9]

Before the Battle of Cunaxa there were 10,400 hoplites and 2,500 peltasts in the army, but although Diodorus Siculus[10] says 8,300 survived to reach the Bosphorus, they then split up, and when they got to Thrace, their number had dwindled to 6,000.[11] The *Anabasis* says '…and with Xenophon there were about seventeen hundred hoplites and about three hundred peltasts.[12] Xenophon was the only one who had cavalry, a force of about forty horsemen.'[13] Xenophon later repeats the number of Greek horsemen, saying 'Seuthes then went off, and Timasion, with about forty Greek horsemen, went with him.'[14]

Seuthes had an army larger than the Greek army; and it grew until it tripled in size, as the news of its success spread. This could mean that Seuthes' army grew to a strength of around 20,000 men, including the Greeks.[15] Such an army could have had, in addition to the Greeks, around 4,000 Odrysian light cavalry, 500 heavy cavalry, 500 archers and slingers, 7,000 peltasts, and 2,000 javelin-armed lighter infantry.[16] These figures are based on the assumption that cavalry formed about one third of the army, peltasts formed the bulk of the troops, and the remainder were lighter infantry, with archers predominating over slingers.

The largest body of mercenary troops that might have fought for the Thracians was provided by the Athenian general Iphicrates for Kotys I (383–359BC). Polyaenus says he had 8,000 men in Thrace,[17] but as he does not say when or who they fought we cannot be sure if this was when he was in Kotys' service or when he was campaigning in the same area on Athens' behalf. Many of Iphicrates' victories were gained using peltasts as the main arm, but what Kotys needed was hoplites, and these probably formed the mainstay of his mercenary force. Kotys' reign ended not long before the Macedonian invasion, but by that time Thrace had been split into three kingdoms and the Thracians had no such infantry capable of defeating the Macedonian phalanx head on.[18] The lack of a solid heavy infantry core for the army, combined with the loose organization of the state, and the constant in-fighting, are the major reasons for the success of later invasions of Thrace. Against the classical Greeks, who lacked cavalry and light troops, they enjoyed some considerable success, with several Greek armies being wiped out during colonization attempts.

The two most important elements of Thracian armies were the peltasts and the cavalry; indeed Thucydides can speak as if these were the only troops used – he refers to Sitalkes' 'Thracian army of cavalry and peltasts.' The rest of the army was composed of lighter infantry (javelin-men, archers, and slingers).[19] It is probable that each Thracian tribe favoured a particular fighting style and had a different proportion of troop-types from other tribes in its armies. For instance, in the *Iliad*, Euphemes arrayed the Ciconians, 'men of the spear,' and Pryaechmes led Paeonians, armed with the bow.[20] Thucydides says that the Getai and their neighbours by the Danube were all mounted archers in the Skythian style.[21] These differences to some extent depended on their local topography. Mountain tribes (such as the Bessi) were more warlike and favoured infantry, while those from the plains favoured cavalry. Thus the Odrysians and the Getai provided the majority of Sitalkes' cavalry.[22]

A Thracian royal army might contain between twenty-five and fifty per cent cavalry, while the army of a single tribe or group of hill tribes might have much less. Sitalkes' army as a whole was about one-third cavalry (about 50,000 men). The Odrysai fielded 8,000 horse (twenty-eight per cent) and 20,000 foot against Lysimachus.[23] A detachment sent by Seuthes to aid the Spartans in Bithynia in 398 was composed of 200 cavalry (forty per cent) and 300 peltasts.[24] Seuthes hired 2,000 Getic light troops for use against the Athenians in the Thracian Chersonese,[25] which indicates they may have been a regular component of Odrysian armies. Alexander faced a Getic army of 4,000 horse and 10,000 foot, or about twenty-eight per cent

cavalry.[26] Later, the Getai hired out 10,000 foot and 10,000 cavalry (fifty per cent) to Perseus' army.

The Bronze Age

Warfare in the Bronze Age was characterized by assaults by light-armed skirmishers and missile-men clustering around chariots equipped with well-armoured javelin-throwers and bowmen. The lord (*wanax*) directed political, economic, and military affairs from fortified citadels characterized by 'Cyclopean' walls (3–9m thick and perhaps over 7.5m high). In Thrace, these walls can be seen at such places as Eumolpia in Plovdiv, and Perperikon. They encompassed a relatively small area sufficient only for the palace, citadel, and stores. They provided room for the ruler and his entourage but not his subjects.[27]

Homer's works describe visits by his heroes to Thrace, and Thracian intervention (by at least three tribes) in the Trojan War. The poet mostly describes warfare of his own time, between 750 and 680BC. However, there are echoes of an earlier time when he mentions tower shields, a boars' tusk helmet, long silver-studded swords, large leather tower shields, chariots, and bronze-edged weapons. Marvellously preserved bronze weapons have been found all over Bulgaria. Some bear a resemblance to long, thin fencing swords that wouldn't be out of place if used by the Three Musketeers. These swords suggest that individual duelling was common, and probably individual challenges were issued as part of the prelude to a battle. It seems that Thracian technology did not extend to the tower shields and long pikes of the Minoans and Mycenaeans. However, boar-hunting figures prominently in Thracian artwork and it is likely that the boars' tusk helmet was used. So it seems that the Thracian elite was very similar to that of Mycenae, while the common soldiers remained skirmishers, and that this situation did not change much until the Macedonian conquest of Thrace.

Dark Age warfare much more strongly resembled Thracian warfare of the classical era, as it revolved around mounted aristocrats who used iron weapons. These led loosely organized infantrymen, armed with leather and wicker shields and spears, javelins, and arrows.[28]

Chariots

Chariots feature on many Thracian tomb paintings and on Thracian metalwork, so it is likely that the Thracians used chariots in the Bronze Age, at least for their leaders. Homer says that Rhesos, the Thracian king, was using a fabulous chariot, and that the Cicones rushed with their

chariots to fight the Achaeans.[29]

> And when I had heard all I wished to learn, I stood still; and I see Rhesos mounted like a god upon his Thracian chariot. Of gold was the yoke that linked the necks of his horses brighter than the snow; and on his shoulders flashed his shield with figures welded in gold; while a gorgon of bronze like that on the aegis of the goddess was bound upon the front of his horses, ringing out its note of fear with many a bell. The number of his army you could not reckon to an exact sum, for it was beyond one's comprehension; many knights, many ranks of peltasts, many archers, a great crowd of light-armed troops, arrayed in Thracian garb, to bear them company. Such the man who comes to Troy's assistance, whom the son of Peleus will never escape, either if he tries to escape or if he meets him spear to spear.[30]

The Thracian infantry seems to have developed its equipment and tactics at this time, and (except for the demise of chariots) not changed them for millennia. Horses and chariots continued to be buried with Thracian kings and prominent Thracians until late in the Roman era, when they changed to highly decorated four-wheeled mortuary carts.

Cavalry

Early Thracian Cavalry

Horse riding epitomized the Thracians. Euripides and Homer called the Thracians 'a race of horsemen' and Thrace 'the land of the Thracian horsemen.' Euripides' characters say:

> **Polydorus:** To Thrace, to the palace of his old friend Polymestor, who farms the fertile plain of this peninsula and rules over a race of horsemen with his sword.[31]

> **Hecabe:** It was my own trusted friend; the Thracian horseman, to whose house Priam had sent him secretly.[32]

Homer says:

> Now Zeus, when he had brought the Trojans and Hector to the ships, left the combatants there to have toil and woe unceasingly, but himself turned away his bright eyes, and looked afar, upon the land of the

Thracian horsemen…[33]

Aphrodite now went back into the house of Zeus, while Hera darted down from the summits of Olympus. She passed over Pieria and fair Emathia, and went on and on till she came to the snowy ranges of the Thracian horsemen, over whose topmost crests she sped without ever setting foot to ground.[34]

This description seems justified, as even though the cavalry only made up a small proportion of their army, they were quite numerous. The Odrysians alone could outnumber all the fifth-century Greek cities and other tribal kingdoms collectively in cavalry forces.[35] Except for the Getai, the cavalry were chiefly unarmoured javelin-armed skirmishers, their only protection being their speed and, perhaps, a flimsy *pelte*. Some may have worn helmets from the fourth century. They would be mainly armed with a curved knife or sword, (usually the *kopis*) and two cornel-wood javelins, or the composite bow (kept in a leather *gorytos*) if they were Getai.[36] Thracian light cavalry are usually depicted on Greek pots carrying two javelins, but clearly they could carry more. A bronze mould for making gold horse ornaments (*phalerae*) from Bozveliisko, Varna region, dated to the end of the fourth to the beginning of the third century BC, is decorated with a rider carrying at least three javelins. He is holding the javelins in one hand, pointing downwards on the horse's right-hand side. It appears the javelins are bound tightly together by an extraordinary thin-necked conical container holding the spear points.

Perhaps the best evidence for the success of Thracian cavalry is the way that the mainland Greeks took up Thracian cavalry dress, and horsemanship. Athenian riders wearing Thracian boots and/or Thracian headdress can be seen on the Parthenon frieze, and wearing Thracian cloaks on Athenian pottery.[37] Later sixth-century Thracian horsemen were familiar figures in Athens. They were introduced by Pisistratus, who had mines in Thrace.[38]



Fig. 24. Greek horseman or Thracian noble? There's not much difference. Detail from Attic black-figure vase, c. 510BC.

Heavy Cavalry

Thracian heavy cavalry is thought to have been in very small numbers, forming small bodyguards, as it is not depicted on Greek pottery at all and is rarely mentioned in the sources. Greek cavalry wearing Thracian garb (cloaks, boots, and/or hats) are shown on Greek pots and in Greek sculpture. If the Thracian nobles were more common then surely we would have seen them somewhere other than in Thracian tombs. It is possible that they were indistinguishable from other heavy Greek cavalry, so they weren't remarkable enough to paint, or that some of the pots said to show Greek cavalry in fact show clean-shaven Thracians. In 429BC Macedonian heavy cavalry operated against the Thracians with impunity during Sitalkes' invasion of Macedonia.

> The Macedonians… made cavalry attacks on the Thracian army when they saw their opportunity. Whenever they did so, being excellent horsemen and armed with breastplates, no one could stand up to them…[39]

This happened again during the Battle of Lyginus between Alexander and the Triballi.[40] Both these incidents tend to confirm the conclusion that there were few Thracian heavy cavalry.

They were armed in a similar fashion to the light cavalry, and wore variations of Skythian or Greek panoplies.[41] What is remarkable is that, before the third century, only Thracian light cavalry are shown carrying shields – did skirmishing require less control of the horse (because wearing armour made it harder to stay on the horse) or was throwing javelins easier than charging? Assyrian heavy cavalry used shields – so why not Thracian

– was this just cultural determinism?

Possibly north Thracian heavy cavalry wore leg and arm armour instead of carrying a shield – some Thracian metalwork imagery can be interpreted this way. Apart from shields found in equestrian tombs, the only evidence for heavy cavalry use of shields is one sixth- to fifth-century silver-gilt belt from Lovech, which depicts a hunt by two armoured cavalrymen. One of them is apparently using a circular shield, but the 'shield' is on the right-hand side and could just be a bump (caused by damage) on the belt's surface.

Thracian heavy cavalry were armed with a minimum of two javelins at least until the fourth century. How they should use this weapon is described by Xenophon. He said cavalry should throw their first javelin at maximum range while charging so as to cause 'javelin shock'. This would be compounded by the swift jabs of the second javelin or the slash of a sword as they came within reach.[42]

Light Cavalry

Why then did the Thracians field so many light cavalry and so few heavy cavalry? The Thracian kings had lots of iron, copper, and gold, and workers with great metalworking skill. Their people were so poor they worked as mercenaries and were sold as slaves. The answer lies in the nature of their society. When they weren't burying it in tombs, the kings used their gold to pay for luxuries and favours. Their income paid in kind would have gone a similar way, with a lot being spent on feasts. Giving out gifts and holding feasts was an important method of maintaining favourable relations with their subject lords and binding together their kingdom.

Thracian society was similar to that of the Bronze Age societies but compared to the Mycenaean kingdoms, their kingdom was comparatively disorganized and decentralized. In an area the size of Thrace there was space for several major Mycenaean style fort/palace complexes and yet only a few are known.[43] There were many small citadels, which probably made the kingdom harder to control, so perhaps the king moved around them rather than building a bigger one of his own. The Thracians made Mycenaean-style 'beehive' tombs quite late into the classical era, In Mycenae, temples were dug into natural hills, and the Thracians did the same thing; where there weren't any hills, they built tumuli in order to dig into them later to construct temples. So although they had a fairly high level of technical knowledge their society was stuck in the Dark Ages and had not developed the organization of the Mycenaean or Minoan kings. The king had limited ability to control his subjects directly, and accumulate

the resources necessary to build and maintain a large force of heavy cavalry.[44]

It seems that Thracian lords presided over political groupings that were big enough to pay for unarmoured light cavalry but too small to allow for heavy cavalry. Either that or the local lords had to send away too much of their surplus to allow them to pay for their own heavy horses and armour. The Homeric society of the Thracians kept fracturing so that only small bodyguards for the king were possible, and maybe he liked to keep it that way to ensure his dominance over his many independently minded minor chieftains. If he did put together a large Thracian federation, it soon fell apart.

They did not develop a true feudal society and the king may have kept too large a portion of the land for his own use. For instance, at Pylos the 'king's estate' is three times that of his most senior official and the estates of the next three lords together equal the size of the king's one.[45] If the king keeps too much land for himself it results in inefficiencies in a primitive economy, as the same amount of land would support more lords and hence heavy cavalry if they ruled it. Compared to Macedon, the Thracians did not develop a centralized state until the third century at the earliest. They lived in scattered villages, and made no attempt to join them together into towns and cities, as happened in Macedonia and Greece. They relied on warfare and agriculture for income rather than trade.

There may also have been little encouragement to change this lopsided army composition. Clouds of light cavalry worked well when not faced by reasonable numbers of javelin-armed heavy cavalry. They were excellent for the hit-and-run raids that comprised the majority of tribal warfare.[46] In a set-piece battle, they could quickly get around the flanks of heavier opponents, while skirmishing with the centre. If the flanks were covered by difficult terrain, the peltasts could attack there instead. Until the end of the fourth century, the main opponents for the light cavalry were other Thracian light cavalry or Thracian peltasts. Light cavalry was its own best neutralizer, while javelin-armed light cavalry charging in wedge formation had a good chance of beating peltasts in the open. The Thracians held their own against the fifth- and fourth-century Greeks and Skythians. The accounts of hoplite battles show that hoplites had a great fear of cavalry and did not practice anti-cavalry drills. It took quite some time for the southern Greeks to learn how to use cavalry and defend themselves against it. The Thracians only got into trouble when they invaded Macedon. The Macedonians had good heavy cavalry forces and trounced them. They were also evenly matched against the Persians and their large cavalry forces.

Xenophon advocates the use of two javelins made of cornel wood: one javelin for throwing, and one kept for hand-to-hand combat.[47] He assumes that the javelin thrower will ride in, throw, and ride away again. He says that the first javelin should be thrown at the longest possible range, to give the longest possible time to rally, turn around and transfer the second javelin to the right hand. He says the most effective method of hurling the javelin is for the horseman to 'throw forward his left side, while drawing back his right; then rising bodily from the thighs, he should let fly the missile with the point slightly upwards. The dart so discharged will carry with the greatest force and to the farthest distance; we may add, too, with the truest aim, if at the moment of discharge the lance is steadily eyeing the mark at the instant of discharge.'

Light Cavalry Shields

Clement of Alexandria's *Stromata* asserts that the Thracians were the first to use shields on horseback:

> The Thracians first invented what is called a scimitar (*harpe*) – it is a curved sword, – and were the first to use shields on horseback. Similarly also the Illyrians invented the shield (*pelta*) … and that Itanus (he was a Samnite) first fashioned the oblong shield (*thureos*) …[48]

There is evidence to support this statement, or at least the argument that Thracian cavalry used shields much earlier than the Greeks – a pottery frieze from Thasos, dated 540–525BC; fifth-century vase-paintings of Skythian (or generalized Skythian/ Thracian barbarians in Phrygian caps) horsemen using *peltai;* and fifth-century vase-paintings of Thracian horsemen with shields on their backs.

The Thasos frieze is of two cavalrymen hunting, wielding a spear overarm in the right hand and holding a *pelte* centrally in the left hand.[49] The *pelte* would seem to be ideal for cavalry use, as it was small, very light and shaped to minimize any nuisance. The riders are sometimes identified as Bithynian Thracians, but could be Thracians from Thasos, Samothrace, or the mainland. The artist shows the reins attached to the rider's belt, or just hanging free, which shows that the riders were on a par with the Numidians in their riding skill (i.e. they could control their horses just using their knees), or the artist's ignorance, inaccuracy, or just the problems inherent with carrying a shield on horseback.

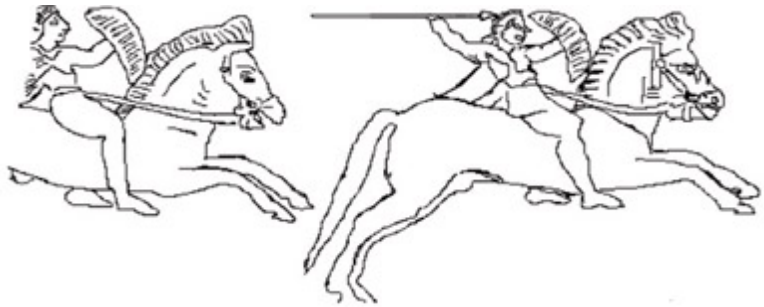


Fig. 25. Pottery frieze from the ancient prytaneum (town hall) of Thasos, 540–525BC.



Fig. 26. Three skythian or Thracian cavalrymen with *peltai* from a Campanian vase, 510BC.

A vase from Campania, dated 510BC, presents three Skythian or Thracian cavalrymen using *peltai*. They carry their spears in their left hands, behind the shield, and the reins in the right hand, which again demonstrates the difficulty of using them all at the same time. This vase is one of several with paintings of 'Skythian' cavalry holding their shields on their left arms. Greek artists were not overly concerned with the ethnic differences between barbarians, so these cavalry wearing Phrygian-style hats and long cloaks (without trousers), and using shields and javelins, could quite easily be Thracian.

The difference could be the level of skill required – obviously Skythians were great horsemen, and the Thracians weren't far behind. Thracians with shields are usually shown on vases found within Thrace – it may be that this detail was unknown to Greek artists from further afield. Both the Karnobat and Sozopol vases are thought to have been manufactured locally in Apollonia Pontica (Sozopol).[50] The skill level (represented in differing tribal cultures) also might explain why some Thracian cavalry had shields and some did not. Possibly artwork of a

Thracian light cavalryman using his shield is so rare because an artist living in a town (e.g. in Athens) didn't see Thracian cavalry using their shields, as the battles were far away. Skythians were even more outlandishly dressed than Thracians, and lived in Athens for much longer. As they formed a sort of police force, they were also much more visible. They were therefore more likely to be painted.

Thracian light cavalry are sometimes shown with a *pelte* strapped to their back (e.g. a fourth-century red-figure vase from Sozopol).[51] The assumption is that it protected against attacks from the rear, as they are never depicted using them in battle. When you consider that it is only light (skirmisher) cavalry that is shown with the shields on their back, and that they did not use the 'Parthian shot' this actually makes sense. Once they had thrown their javelins and turned away from their enemy, the light cavalry would be quite defenceless. While retiring they would be unable to see, and therefore, dodge any missiles directed at them from their rear. This situation would repeat itself after they charged in, threw javelins, and retired. Having a shield and a free-floating cloak on their back would be quite helpful, and integral to their skirmishing tactics. The cloak might muffle the blow or even stop missiles at extreme range. This behaviour would be identical to the peltasts, whom both Xenophon and Homer (e.g. Ajax in the *Iliad*) say slung their shields over their backs when running away, partly to provide some protection to their backs.

One problem with this idea, is that the *pelte* can clearly be seen sticking out towards the rear of the rider at ninety degrees from the rider on some vases. The best explanation for this peculiar image is that the shield was flapping about madly while the rider was in motion.[52] The effect of painting the shield this way was to add to the drama of the painting by giving it extra movement and an indication of the speed of travel.

It is doubtful it would have any protective value if the shield did not stay flat on the rider's back. The general conclusion reached is therefore that Thracian cavalry only used their shields (if they had any) for dismounted action until the third century.[53] This means that the reason why some cavalry did and some did not have shields in the same period is that those with them anticipated some dismounted action, and were a type of mounted infantry or dragoon.

Tarantine coins show riders with shields dismounting, and the Tarantines actually practised this in athletic events.[54] This is the only evidence I know of that points to javelin- and shield-armed light cavalry operating in this manner in the ancient world. Since Tarentum was so far

from Thrace it obviously has no direct bearing on this argument, except to show that it was possible. There is no evidence that dismounting to fight was normal practice, but it would make sense given the success of *hamippoi* (see below) and light troops who mixed with cavalry in cavalry actions. Perhaps this is actually who the *hamippoi* were. Livy's encounter between Roman and Macedonian light cavalry at Athacus in 200BC has the Romans either fighting from horseback or jumping down and fighting the Macedonian *hamippoi* on foot.[55]

Recently discovered evidence, in the shape of the Karnobat vase, sheds new light on the shield debate, making the dismounting argument redundant. It and the Sozopol vase (probably made in the same Black Sea coast workshop and dated about 425BC) are the only two pots made (and found) in Thrace (so far) that depict Thracian warriors. The Sozopol vase makes a useful comparison; it depicts the usual peltast carrying his shield on his left arm, and a cavalryman with a shield sticking out of his back. It confirms that peltasts did use their shields, which may seem a silly thing to say until you look at the Karnobat vase.

A cavalryman between two peltasts can be seen on the Karnobat vase. Both peltasts are running, and the one at the front is looking back and waving as if to tell the others following to hurry up. The two peltasts and cavalryman are evidently rushing to get somewhere – the suggestion is that they are hurrying to a battle and the vase was a special commission by a local Thracian ruler to commemorate a victory. What is unique about this vase is that shields are painted sticking out of the back of both the rear peltast and the cavalryman. If so, then it confirms what Xenophon said[56] about peltasts throwing their shields over their backs when running. More importantly, it indicates that both peltasts and cavalry carried their shields on their backs while travelling, and the shield flapped about if they moved fast. It means the scene on the Sozopol vase should now be interpreted as two men travelling to a battle, not fighting in one, and that the cavalryman would be holding his shield in his left arm if the painting was of a battle scene. It means that since peltasts definitely carried their shields on their backs when travelling, and on their left arms in battle, the cavalry probably did so, too.

Mercenary javelin-armed and shielded light cavalry of the Hellenistic era were often called Tarantines. They are thought to have been the first Greek light cavalry to have used shields. Knowledge of their mode of fighting entered the Hellenistic world when Pyrrhus of Epirus invaded Italy. Thracian cavalry had been around for longer than the Tarantines, and Pyrrhus was certainly aware of them – probably he had some Thracians in

his army. Yet javelin-armed cavalry who used shields became known as 'Tarantines', not 'Thracians' (as they might if the Thracians adopted shields first). What distinguished Tarantine from Thracian cavalry – if they had the same equipment? Perhaps it was a combination of Greekness, clothing, the shield strength and shape, and most important of all, fighting style. The Tarantines were pure skirmishers, while the Thracians were willing to fight hand to hand, despite their lack of armour. Although Tarantine coins show riders using round hoplite shields, similar shields have been found in Thracian tombs, and the Sveshtari tomb has a drawing of a shield bearer carrying such a shield behind his mounted master.

The three surviving Hellenistic military manuals say there were three or four different classes of light cavalry. Asklepiodotos' manual states that there are four types of light cavalry: bow-carrying cavalry that fight at long range only; and skirmishers (*'akrobolistai'*) that can be either bow- or javelin-armed. The javelin throwers are further divided into two classes; one, the *'elaphroi'* (light), throws javelins and then closes in for close combat, while the other, the Tarantines, throw javelins without engaging in close combat.

Table 4: categories of Hellenistic Light cavalry.

Author	*Light Cavalry Type*					
	Bows Horse Archer	*Bow + Jaelvin + sword*	*Javelins + combat*	*Shoot*	*Javelins only*	*Shoot*
Asklepiodotos	*Akrobolistai = fight at long and short range*					
	Bows at long range only	Bows and javelins	Javelins or combat	skirmish	–Javelins +Javelins	– skirmish only
			Elaphroi (Thracian?)		Tarantines	
Aelian	*akrobolistai* horse archers		*Hippakontistai* Tarantines		*Hippakontistai* 'True' Tarantines	
			Elaphroi (Thracian?)			
Arrian	*akrobolistai*					

horse archers	Hippakontistai Tarantines Elaphori (Thracian?)	Hippakontistai "True" Tarantines

Aelian divides the skirmishing light cavalry (*akrobolistai*) into horse archers and those that use javelins, *'hippakontistai'*, or Tarantines. Of the Tarantines, some are 'properly' called Tarantines, and throw their weapons from a distance; the others, the *elaphroi*, throw one or two javelins before fighting hand to hand. Arrian's description is essentially the same as Aelian's, except that he says that the 'proper' Tarantines do their shooting while either far away, or riding in circles; while the *elaphroi*, having shot at the enemy, either then engage them with spear or sword, or are kept in reserve.[57]

These different classifications give a clue to the value of Thracian light cavalry to their employers. Evidently, since they were known for their ferocity and fought in wedge, they were of the more versatile *'elaphroi'* type and were just as keen to fight hand to hand as they were to skirmish. Having thrown one or two javelins, they would either then engage their enemy with spear or sword, or move back into reserve. This would explain why there was a permanent 'Thracian' regular cavalry regiment in the Ptolemaic army as well as Tarantines, even when the Ptolemies had no direct access to Thrace. The name indicated a fighting style, rather than the nationality of the troops.[58]

Thracian Horses

Horses were very important to Thracians (especially to tribal chieftains and their retinues), both as a symbol of military and economic power and as an animal that was sacred to the Thracian sun god. Deities (most prominently the Thracian Hero) are often shown mounted. Horses were presented as parental and political gifts. Kotys I (383–359) gave away two herds of white horses as part of his daughter's dowry.

Although J K Anderson deems the Thracian horse to have been 'a compound of all possible faults,' there seems to be only one ancient source that agrees with him.[59] Grattius Faliscus (first century AD) described Thracian horses as easy keepers and excellent performers, but with 'ugly necks and a thin spine curving along their backs;' that is, in horse terminology, with ewe necks and a roach back.[60] Anderson's theory is that, as Thrace had been scourged by numerous wars and invasions, whatever

was good in the equine sense was stolen or destroyed. The same argument would make possible an improvement via a mixture of breeds from Asia; the argument about wars and invasions probably only applies after the Macedonian conquest. Actually, they seem to have been of good quality. Whatever the case, Alexander apparently equipped his cavalry with Thracian horses, which shows they were better than Greek or Macedonian breeds.

The period of Persian rule in Thrace probably resulted in improved breeds and eventually the larger horses seen in third-century BC tomb paintings. Horses of the famed Nisaean breed could have been acquired through banditry or trade during this time. There is at least one instance during the Persian retreat from Thrace when the Thracians could have run off with some of these horses – during a night attack when they captured the King's chariot, which would have been pulled only by the best horses, while similar high-quality horses of the bodyguard would have been nearby.[61]

The *Iliad* says Thracian horses were 'huge'. Studies of Thracian horses from fourth-century BC tombs show that they were larger than steppe ponies and at least comparable to the breeds on the Greek mainland, which reached 1.34m or thirteen hands. They had a long thick mane, a short tail, and carried their heads high.[62] The biggest would have been between 1.36m and 1.44m, or fourteen hands at the withers, similar to stallions of the Przewalski horse.[63] This size, between that of a modern pony and a horse, is now called a Galloway. It was still small enough that riders who rode with their legs straight barely kept their feet off the ground and sat further back on the horse than modern riders (this can be seen on the Karnobat vase).[64]

Horses were trained and bred for racing, a prerequisite for successful cavalry warfare. Xenophon rates Thracian horses to be as good as Persian and Greek animals, and says that the Odrysians habitually ran their horse races downhill.[65] In the *Iliad*, a Trojan spy reports that the Thracian king Rhesos has the finest and strongest horses he has ever seen, 'whiter than snow and fleeter than any wind that blows.'[66] White horses were the favoured mounts of kings – Xenophon observed a swift white horse being presented to Seuthes while he was at a banquet. The Megarians asked an oracle who was better than them. The extraordinary reply received was: 'Better than all other land is the land of Pelasgian Argos, Thracian mares are the best, and the Lacedaemonian women.'[67] Thracian horses could be quite spirited – the poet Anacreon compared a haughty woman to a frisky Thracian filly.[68] Virgil describes three Thracian horses: one had white

fetlocks and ‘a snowy star’ on the forehead; another was a piebald; while a third was dappled with white. Horses in the Kazanluk paintings do not have any markings and are different shades of brown, except for a single white horse. The Alexandrovo horses are grey, brown, or yellow.

There are numerous depictions of Thracian horses, many of which show exquisite detail. It is interesting to note that Thracian horses seem to have been larger than Skythian and Saka horses, which were of the Przewalski type – small, stocky ponies with naturally short manes and long tails. Skythian horses found in permafrost graves were chestnut, browns, bays or jet black. None were dapple grey, mottled bay, skewbald, roan or grey. White patches, which are common on modern brown horses, were absent. It is thought the Skythians avoided light-coloured or white-marked horses, as they had a corresponding light-coloured hoof that was easily injured. So apparently, it was not until the invention of the horseshoe that we start to see white patches on horses’ extremities.[69] Arrian says that Thracian horses had great endurance, possibly through a mixture with Skythian horses:

> Where there are fairly level plains as in Mysia, the country of the Getai, Skythia and Illyria, the stag is hunted by men mounted on Skythian or Illyrian horses. They are slow goers at first … but for a hard day’s work they can hold out against anything.[70]

The horse trappings were well crafted and highly decorative, and horses wearing all the items discovered in Thracian tombs must have made a fine sight.[71] A variety of harnessing methods was used, some of which resembled Skythian and Persian practice. Leather bridles in red or dark brown colour consisted of side-straps, nose bands with or without chinstraps, and often forehead-straps and throat-lashes. Reins were the same colour. The harness fittings (most often disks or rings) were made of a mixture of iron, bronze, gold, and silver, or bronze and silver. Harness fittings were adorned like those of the Skythians, featuring real or fantastic animals, but many featured distinctive anthropomorphic motifs, including the Thracian horseman and Thracian mythology. Sometimes hundreds of exquisitely crafted ornaments were used on a single horse.

> There was a separate native tradition which nevertheless grew closer to similarly evolving Royal Skythian schemes during the fourth century. At the same time, Greek influences became increasingly more prominent.[72]

The meaning of these ornaments has often been discussed, but apparently not their usage. The horse decorations painted in the Alexandrovo tomb demonstrate how they were worn – one on the nose, one on the forehead, and two on each side of the head. There are a lot of similarities to the Kazanluk figures, including the pose of the horses and fancy saddlecloths. Except for the nose decoration, the Alexandrovo paintings confirm positions shown in the Kazanluk tomb paintings, which show disks in these locations. Where more than six appliques have been found, the most likely location for the adornments would be on the chest strap and along the forehead strap. Horses with the most basic ring decorations generally only had them on each side of the head. The nose and forehead ornaments in the Alexandrovo tomb are significant in that similar decorations have been found in other tombs but their use had not previously been illustrated.

Thracian horses were apparently branded with an owner's mark, as the royal or Odrysian brand of a *labrys* (two-headed axe) can be seen on the left rump of a horse depicted on an appliqué from the Peychova Mogila near the royal temple/tomb at Starosel.[73]

Most Thracian bits were quite severe and consisted of two 'S'-shaped branches with two or three rings or holes connected by a chain. These can be seen on the Alexandrovo tomb, though on the Kazanluk tomb the outside branches are straight with curved ends. Thracian bits were usually made of iron, or iron covered with silver foil, although some may also have been of bronze. The extent to which the Greek type (the 'hard' bit) replaced or supplemented the native ones in Odrysian territories has still to be clarified, but this bit was rarely used before the mid-fourth century. The Greek bit usually consists of bronze parts fitted around an iron core with bronze links. It helps the horse to salivate and makes it far easier to manoeuvre.[74] The prominent crescent or 'S'-shaped cheek-pieces make it easier to turn a horse's head when riding one-handed, thus freeing the other hand to hold a weapon. The lower half of the 'S', curving under the horse's chin, may also have acted as an early type of curb bit.[75] This type of bit can clearly be seen on the Macedonian horses on the Issus mosaic. It required less skill and training on behalf of the horse and rider but precise control of direction and speed were harder to achieve.

Later Cavalry Developments

The fourth century saw the start of many changes in cavalry dress and equipment. The distinctive Thracian dress was discarded, additional armour of new types was worn, shields and saddles came into use, and light infantry was trained to support cavalry.[76] Thracian cavalry appear to have

followed the Greeks or Celts in adopting shields around 275.[77] Thracian cavalry on the Pydna monument, the Abdera tombstone, and some (later) depictions of the Thracian hero all carry shields. All these artefacts are dated to the third century BC or later. Light cavalry was now likely to have the basic protection of helmet and shield, while heavy cavalry took to wearing iron helmets and composite corselets. They may also have used long lances.

Spurs

Some time in the latter half of the fourth century, Thracian cavalry began wearing spurs. As mentioned above, a bronze mould for making gold horse ornaments (*phalerae*) from Bozveliisko, Varna region – dated to the end of the fourth to the beginning of the third century BC – is decorated with a rider carrying what looks to be a sheath for multiple javelins. He is also wearing spurs (on both feet), possibly the first such depiction in the western world. Thracian cavalry are otherwise not depicted wearing spurs.

Eleven Spurs have now been found in Helis, in Getic territory, not far from Bozveliisko. They are undated, though they must be some time between the middle of the fourth century and 250BC, when the city was destroyed by an earthquake. The archaeologists who found them favour the earlier date as they say that the quantity and types of spurs (they nominate four types) suggest that spurs could have been in Thracian use before the Celtic invasion. They say that the rider in the Sveshtari tomb picture is wearing spurs, and new finds in southern Thrace, Macedonia, and Illyria indicate a non-Celtic origin for the use of spurs by the Thracians.[78] I do not see any spurs on the Sveshtari tomb drawing, although there are some cracks on the drawing that could be interpreted that way.

Thirty-two spurs have been found in Triballi territory, between the Timok and Iskar rivers of northwestern Bulgaria.[79] These are dated to the period after the Celtic invasion, i.e. second century BC to first century AD. Although they are most probably Celtic, they could have been used by the Triballi, and are indicative of the type of spurs worn at that time. Each spur consists of an arch-shaped iron clamp, with a single point projecting from the middle. Given the evidence of the mould from Bozveliisko, it is odd that only one spur has been found at each site. Does this indicate that only one spur was used at a time, worn on the right or the left foot? That would be rather unlikely, as spurs are generally only needed to make a horse go faster straight ahead. Using one spur would mean that it would only go faster to the left or the right. Burying only one spur with its owner more likely had some religious or cultural significance.

There were two main types of spurs, each with several variants. In the first type, each of the two ends of the spur turns into a narrow axle ending with a solid iron element. A leather strap is tied up to the axle; the strap presses the arch-shaped part to the rider's foot and the iron element stops it from slipping off the spur. The second type of spur has openings in its ends. The leather strap affixing the clamp to the rider's foot passes through them.

Modern spurs are usually held on by a leather or leather-like strap, called a spur strap, which goes over the arch of the foot and under the sole in front of the boot heel. Some western designs have a leather strap that goes only over the top, with a heel chain or a rubber 'tie-down' instead of a strap under the boot. There are also styles with no straps where the heel band simply is very tight and slips on wedged between the sole and heel of the boot. All of these designs assume that you are wearing a boot with a sole and a heel, but Thracian riders did not have heels on their boots. This explains the design of the spurs. A Spanish re-enactor has shown how they were attached. He made Roman spurs that were of a similar design to the Thracian spurs, and attached them to moccasins without heels.[80]

Lances

In the latter half of the fourth century it is probable that some Thracian heavy cavalry changed from using 2–3m long javelins to using 3–4m long lances. There is both literary and archaeological evidence to support this contention. The archaeological evidence comes from all three of the painted tombs, and Helis.

The Alexandrovo tomb paintings clearly show double-ended cavalry spears, and there seems little point in having a butt spike on a javelin. A lance needed to be counterweighted and/or the wood tapered so it could be carried close to the rear end. Both ends of a lance have been found in the Getic capital of Helis. An iron 'endpiece of a spear' was discovered sometime between 1986 and 1988 in Helis. It is 4.7cm long, is hollow and cylindrical at one end, and has a four-edged tip at the other.[81] This item is corroded and the infantry *sauroter* was normally deliberately made of bronze so it would not rust when stuck in the ground, so it seems that this was in fact the counterweight/rear point for a lance. A possible lance-head was found on the defender's side of the south wall. According to Stoyanov:

> By the shape and proportions it is quite similar to the point of the Macedonian *sarissa*. With the necessary deal of caution it could be assumed similar to the spearheads of the so-called light *sarissa*, used by

the cavalry during the Hellenistic period.[82]

The appearance of such a lance can be seen on the Alexander (Issus) mosaic, which depicts both ends of Alexander's 3.6–3.8m-long *xyston*.

In the paintings from the *dromos* (entrance corridor) of the Kazanluk tomb, there are several cavalry using long lances in exactly the same way and exactly the same pose as Alexander the Great in the Issus mosaic. On both the western and eastern sides of the *dromos* these riders (five in total) are on the left-hand side. The riders on the left-hand side generally hold their spears down low (at waist or thigh level) in an underarm hold thumb pointing forward, while those on the right hold theirs high in an overarm hold, with the thumb pointing back. This was usually taken to mean the troops on the left were from a Macedonian force.

If the flat *(kausia*) cap wearers are in fact Greek or Thracian *strategoi*, then the riders could all be Thracian. Even if the riders on the left are all Macedonian, there is at least one rider on the right, on the western frieze (the one formerly identified as Seuthes III), who is holding his spear in the same way as his Macedonian opponent, i.e. low down and parallel to his horse's right-hand side. You can't see his lance clearly as it is obscured by his horse, but this is the most likely explanation of what he is doing. Philip Sidnell (citing an experiment by Peter Connolly) says that since the couched lance wasn't used until the introduction of stirrups and the medieval saddle, there were only two ways to hold the third-century lance.[83] These are the two ways illustrated on the Kazanluk paintings.

One of the horse handlers on the Kazanluk dome painting is probably holding one of these lances, as he is standing up holding it vertically and it is higher than both the horse's head and his outstretched arm. The arms bearer in the Sveshtari tomb drawing is also carrying a finely balanced long lance. In this case, the lance length is about twice his height. It must be fairly well balanced because he is carrying such a short part of it in front of him, over his left shoulder. This would accord with experiments made with reconstructed tapering lances (by Peter Connolly) that are balanced if gripped 4ft from the butt end.[84] The cavalry spears in the Alexandrovo tomb paintings have large spearheads on the rear end that look excessively large and out of proportion but may be accurate depictions of an early form of counterweight point used on a non-tapered lance. Such excessively large spearheads have been found in Bulgaria, although the ones I saw were dated to the Republican Roman period. Those spearheads usually come from noble/equestrian tombs and are unlikely to have been from a foot soldier's weapon.

There is only one known textual reference to a Thracian lance – that which went through Philip II's thigh and killed his horse. Minor Markle says[85]

> Didymus must mean one of Philip's Triballian pursuers, and the passage should be translated: 'He (Philip) received his third wound during the foray against the Triballi, when one of his pursuers thrust a *sarissa* into his right thigh and made him lame.' Justin (9.3.1–3) adds a relevant detail. He writes: '… Philip was wounded in his thigh in such a way that his horse was slain through his own body.' Surely, Philip fleeing on his horse could not have been wounded by a Triballian infantryman chasing him with a long lance. If Philip was mounted, so also must have been his pursuer. The conclusion is inescapable that in 339 B.C. the Triballian cavalry were armed with *sarissae*.

The full text of Justin IX.3 is as follows:

> But as Philip was returning from Skythia, the Triballi met him, and refused to allow him a passage, unless they received a share of the spoil. Hence arose a dispute, and afterwards a battle, in which Philip received so severe a wound through the thigh, that his horse was killed by it; and while it was generally supposed that he was dead, the booty was lost. Thus the Skythian spoil, as if attended with a curse, had almost proved fatal to the Macedonians.

Although I do not deny the force of this argument, I believe that this spear is just as likely to have been an infantry spear because we know that Thracian infantry used long thrusting spears, and the terrain in which this incident occurred favoured an infantry action.

A comparison with a silver octodrachm of Alexander I (495–445BC) reveals how Macedonian horsemen were originally depicted in the same way as Thracians, complete with double javelins.[86] Some time in the fourth century this changed to the *xyston*, as described by Arrian, and revealed in the Issus mosaic and the Kinch Tomb (310–290BC, in Lefkadia). The Thracians seem to have followed a similar process, and changed to the new weapon at about the same time as the Macedonians.

Saddles and Saddlecloths

If the Thracians were using lances, they may have learnt about them from the Skythians at about the same time as the Macedonians started using

them. If Thracian cavalry were defeated by Macedonians using lances this would have provided further impetus to the shift to the new weapon. The change may have been made easier by new developments in saddle technology.

Prior to the fourth century, horses were ridden bareback, as stirrups, horseshoes, and saddles had not been invented. Although horses are often shown without saddlecloths, this may have been artistic convention, meant to show off the lines of the horse's body. Xenophon says a man may ride bareback, but assumes saddlecloths are standard, at least for war. One of the Lukovit plaques may show a rider using a saddlecloth.

Most saddlecloths were simple rectangles or animal skins, but they could be highly decorated. For example, many brightly coloured saddlecloths are shown on the Kazanluk and Alexandrovo paintings. One is red with yellow decoration, except that the tassels on the rear points are white. Others are straight-edged and plain red. In the Alexandrovo tomb, the saddlecloths are coloured blue and red, blue and white, or red and white. All have simple geometrical patterns – none show the elaborate decorations used by the Skythians and Persians, who included birds and flowers in their designs. The Triballi or Getic horseman from a fourth-century silver gilt jug in the Rogozen treasure[87] is quite dissimilar. He has a complicated zigzag design that joins the saddlecloth to the chest strap, and further designs on the saddle. Not far away, in Vratsa, 250 silver appliqués were found, 206 of which were tiny heads, which might have been attached to the reins, or sewn onto a saddlecloth. Animal-skin saddlecloths were also used, for example one of the riders in the Alexandrovo tomb paintings is sitting on a leopard skin.[88] These beautiful animal-skin coverings were used only by kings, their guards, and senior officers. The material used for Thracian saddlecloths is unknown, but Skythian and Persian cloths were made of felt, sometimes with leather edging or backing. Wool and hemp are other possibilities. They were held by breast and girth straps that were knotted around toggles or spacers, buckles being unknown.[89]

The first saddle used by the Skythians was essentially a cushioned saddlecloth. Xenophon recommends a thick quilted saddlecloth, and the pad may derive from this. Leather covered cushions with wooden supports were stuffed with deer hair or straw, and stitched with sinew thread. In 1859 a wooden saddle core was found in a late-fourth-century-BC tomb near the city of Kerch (ancient Panticapaeon):

> It was a curved wooden plate measuring 28 × 22.5cm, its bottom having a hollow, about 1cm deep, which was probably intended for a

padding of soft material like felt. It should be noted that some spots of the plate surface had been very worn out and even polished. Its sides are provided with cuts, in which the ends of a bent wooden rod, 2cm thick, serving in all likelihood as a basis of the saddle counter, are fastened. The rod-and-plate junction is embraced with a bronze yoke hammered into with little bronze nails.[90]

This means that the Skythians were using rigid-construction saddles in the late fourth century, when Skythian warriors began to employ long lances. In order to control such a finely balanced weapon in battle, a firm seat was necessary to stop the horseman from falling off when his lance struck home. The new saddles were provided with rigid supports in the form of front and rear arches or in the form of four horn-like projections. The first known depiction of the Celtic horned saddle is on the late-second-/early-first-century Gundestrup Cauldron, which is believed to have been made by Thracian metalworkers.[91]

The southern Thracians learned of the simple Skythian saddle through their northern cousins. One of the horses from the Kazanluk paintings has a low, dark brown saddle on a cream and brown cloth. Both the front (pommel) and back (cantle) of this saddle have low peaks on them that are perhaps early forms of the 'horns' on the Skythian saddle. The third-century Sveshtari tomb shows a Hellenized king of the Getai sitting on a richly decorated saddle, with four long pendants, painted red. Despite the faintness of the drawing, the saddle is quite prominent and is evidently much more than just a saddlecloth pad. The same can be said for the aforementioned Triballi or Getic horseman on the golden fourth-century Rogozen jug.



Fig. 27. Triballi or Getic horseman on 4th-century BC silver-gilt jug from Rogozen. Note the depth of the saddle (raised front and rear), chest strap decorations and the 'horn' on the horse's head.

The Alexandrovo and Kazanluk tomb paintings show that carrot-like tassels sometimes hung from the chest strap. The chest strap was also often decorated with metallic disks of one sort or another. In addition, The Lukovit appliqué shows a chest strap decorated with a series of 'X's. A bizarre ornament is worn on the forehead of two Triballi or Getic horses on a silver gilt jug from the Rogozen treasure.[92] This looks like a unicorn horn bent backwards, and is similar to decorations used by Skythians. The same horse also has a thick saddle, and metallic ornaments on the cheek and throat straps.

Cavalry Shields, Swords, and the Shift Back to Javelins

The introduction of saddles and more severe horse bits with sidebars allowed cavalry to use shields from about the third century onwards. During combat, the reins were held in the shield hand, and the shield pressing against the horse's neck could replace the left rein in order to make the horse turn to the right.[93] This may have acted as a limitation on the size and shape of cavalry shields. Cavalry shields could be round with a central boss, (shown on first-century carvings of the Thracian hero) oval like the *thureos* (shown on the Abdera tombstone),[94] or very large and circular with a spine boss (the style on the Pydna monument).[95] There are two such shields on the Pydna monument, probably carried by Thracians. The introduction of the shield in the eastern Mediterranean is usually attributed to the Tarantines via Pyrrhus of Epirus or the Celts. The Celts overran Thrace in 280BC, while Pyrrhus campaigned in southern Italy in 280–275BC. I consider it unlikely Tarantines were responsible for the introduction of cavalry shields to Greece at that time, because the typical Greek cavalry shield of the third century was a flat, spined shield rather than the heavily rimmed and bowl-shaped 'Argive' *aspis* embossed on Tarantine coins. Therefore such spined shields were probably adopted as a result of contact with the invading Galatians in exactly the same manner as the *thureos* was, since both the *thureos* and the round, spined shield were used by the Galatians.[96]

For the Thracians, though, as we have seen, the story seems to be a bit different – they could have learnt how to use cavalry *peltai* from the Skythians or started using them independently. The Thracians were already

in contact with the Celts from the latter half of the fourth century so it is likely that the Celts influenced them to change to Celtic-style shields. The Illyrians were using them even earlier, but do not seem to have effected the change in Thracian practice as there is no evidence that *thureos*-style shields were in use until the end of the fourth century. It usually requires the efforts of a great leader or a series of defeats to cause a switch to new weapons and/or armour. The latter occurred with the Celtic invasion.



Fig. 28. Phalerae from horse trappings from the Lupu treasure (Romania)

At the time the shields were taken up, javelins were substituted for lances. On the Pydna monument, you can't see what type of spear the Thracian cavalry are carrying, but a shorter spear may safely be assumed, as a longer spear would definitely show beyond the horse and shield, like the Kazanluk paintings. It should be noted that there are also four figures using lances (or javelins) in a downward overarm thrust that do not have shields, and two of them could be Thracian. There are also three other mounted figures using javelins without shields.[97] This may not have been simply because it was so difficult to manage the lance and shield without lifetime training and stirrups plus high-backed saddles. The javelin could be held in one hand and did not get in the way of large shields. There may have been another impetus for the larger shields to be taken up. This was the introduction of new military technologies, or rather their widespread prevalence in the 270s BC.

At the same time that the switch to the javelin and large shield with spine boss took place, there was the introduction of the 'door' or tower shield (the *thureos*) by infantry, the conversion to, or extensive use of, the pike, and the wide use of the longer cavalry sword, a standard *kopis* now being too short. Celtic swords were amongst the longest used in the ancient world. There may also have been a change in tactics – perhaps javelin-armed cavalry were more inclined to ride past their opponents, while lance-

armed cavalry rode directly towards them. The type of combat between these weapon systems that resulted can be seen on the Pydna monument.

Some evidence for this can be seen in the encounter between Philip V's cavalry and the Roman cavalry in 200BC near Lyncus. Although this involved Roman cavalry much later, the effect must have been similar. The Roman and Macedonian cavalry charged each other and fought until exhausted, the Romans having slightly fewer casualties. The Macedonians

> had seen wounds caused by spears, arrows, and, rarely, by lances, since they were accustomed to fighting with Greeks and Illyrians; but now they saw bodies dismembered with the 'Spanish' sword, arms cut off with the shoulder attached, or heads severed from bodies, with the necks completely cut through, internal organs exposed, and other horrible wounds, and a general feeling of panic ensued when they discovered the kind of weapons and the kind of men they had to contend with.[98]

It seems likely that there was also some increase in the prevalence, range, or effectiveness of missile weapons (possibly through training, as training improved from the fourth century onwards in the Hellenistic world), though there is no proof of this. Missile weapons are particularly deadly to shieldless cavalry, and a small improvement against cavalry would have effects out of proportion to the change. It's probably just a coincidence that, during the third century, cavalry encountered heavy Celtic and Roman infantry that stood to receive a charge and had some limited missile capability; the Romans in particular having a nasty close-range missile weapon. The Celts also used chariots, which could carry more missile ammunition than an ordinary cavalry horse.

At the Granicus battle, Alexander is stated to have had a clear advantage over his Persian opponents because of the longer reach of his lance. Actually, his lance was nearly his undoing, as the tapered construction must have made it brittle, and he soon broke it. He then had difficulty getting another one, and nearly lost his life when the Persians got close enough to use their sidearms. The javelin, besides being shorter, easier to manipulate and more versatile, was probably of uniform thickness and therefore stronger and less likely to break. It was also a stand-off weapon that could be used safely against pikemen or thrown over or into those big infantry shields. It may have required less skill to use than a lance. It still had a longer reach than the longer cavalry swords, even the Celtic swords. Troops charging in wedge would still be looking for a gap in

the enemy line, so you could still charge home with a javelin.

A big, strong cavalry shield would protect against the swords and would not have to be moved much. The latter is an important consideration, as the rider (unless he is Numidian) has to control the horse with the same arm as the one that is holding the shield.[99] The Celts used their own version of the Skythian horned saddle, and may have improved it so that it was easy enough for the average rider to use the shield and stay on the horse. Although the shields look very wide on the Aemilius Paullus monument, they also look rather thin, and the shield spine-boss is very prominent. This suggests that the weight was kept down by expecting the shield boss to do most of the protective work.

The *kopis* was mostly replaced in cavalry service by a long sword near the end of the fourth century. All of the cavalry in the Alexandrovo and Kazanluk paintings carry straight swords, probably the *xiphos*. Mercenary Thracian cavalry of the late Hellenistic period also used the *sica*, a large curved sword. This seems to be the Roman name for any curved sword or knife, as it was also used for the sword of the Thracian style of gladiator, and for Celtic knives, so the cavalry *sica* was probably like the *kopis* or the traditional Thracian curved swords. In 130 a Thracian cavalryman fighting for a Pergamene pretender cut off the head of the Roman consul Crassus with a single blow from his *sica*. In 163 at the Battle of Marissa, a Thracian cavalryman (probably using a *sica*) chopped an arm off a Jewish rebel, also with a single blow. Nick Sekunda suggests that the *sica* may have been similar to the *rhomphaia* when used in Thracian hands, but the *rhomphaia* would have been too unwieldy for cavalry use, so a curved sword is more likely.[100]

Hamippoi

A force of light infantry was attached to early second-century BC Thracian noble cavalry.[101] These may have been trained to fight alongside the cavalry, charging with them, pulling their enemies out of the saddle, fighting dismounted opponents, and injuring the enemy horses. Bithynian cavalry too seem to have been closely supported by attached infantry. Sabin et al. say that they were ‘common to … pre-state Thracians,’ but the evidence for this is lacking.[102] Some fifth- and sixth-century BC vases present Thracian cavalry and infantry closely working together – the Karnobat vase even has a man on foot leading the cavalry.[103] They are not necessarily *hamippoi* and (although their use was standard in Greek armies from the first half of the fourth century[104]) Thracian use of such troops is not recorded before the early third century. At the Kallinikos skirmish in

171BC the text can be interpreted to mean that there were Thracian infantry amongst the cavalry, trying to hamstring their opponents' horses. The Agrianians acted this way also at the Battle of the Granicus River.[105]

That was probably a result of Hellenistic influence, as Greek and Macedonian generals were using light infantry in close support of their cavalry long before.[106] Gelon of Syracuse had *hamippoi* in 480, and as early as the Mantineia campaign in 418BC the Thebans seem to have fielded troops specially trained in this role, 'five hundred cavalry and five hundred dismounted troops trained to operate with the cavalry.'[107] In 365BC Xenophon strongly recommended their use, saying that cavalry without *hamippoi* were much weaker than cavalry accompanied by such a body of troops.[108] He says the *hamippoi* increased the flexibility and effectiveness of a cavalry force, as the *hamippoi* could be hidden behind the cavalry and ambush the enemy. Other uses for them include as a rearguard or to strengthen a cavalry defence.[109]

It has been said that the idea that such troops held onto the horses' tails seems a dubious one, as this would have been likely only to result in many of them being debilitated by kicks from annoyed horses or dragged off their feet. However, I have seen many modern endurance riders hold a horse's tail (without injury) when running uphill, to let the horse pull them up the hill when it is too steep to ride.[110] A fourth-century grave relief in the Louvre confirms that Athenian *hamippoi*, at least, did do this.[111] Waldemar Heckel suggests that Alexander III's royal hypaspists operated as *hamippoi* and performed prodigious feats of endurance.[112] He cites Curtius Rufus – the example of Philip, the brother of Lysimachus, who, while the king rode 500 *stadia*, kept up with Alexander on foot even though he was wearing armour and carrying weapons.[113] He then proceeded to protect the king in hand-to-hand combat.

The tactic of attaching javelin-armed light infantry to cavalry forces was frequently used well into the Roman era. Sometimes the same effect could be achieved by a certain proportion of the cavalry dismounting. The Romans used it especially if they were weaker in cavalry, and were able by this stratagem to beat larger or more effective enemy cavalry forces. The reason these troops were so effective is that 'in the heat of the fight, when a [mounted] man is occupied solely with the danger that stares him in the face, someone on foot, creeping along unnoticed close to the ground, can stab a horse in the flank, bringing his rider headlong to the ground, and finish him off without difficulty.'[114]This tactic worked best when the combined force waited to be attacked, or was able to make an attack over a short distance, e.g. a flank attack, as this made it easier for the javelin-men

to keep up with the cavalry.

Another variation of this tactic was used by the Numidians at Ruspina in AD 46. There, javelin-men mixed with the cavalry charged the Roman infantry together. When the cavalry retired, the light troops held their ground and prevented the Romans from pursuing the horse, which regrouped and returned to the attack. The Numidians were thus able to keep up a constant hail of javelins, while any Roman who rushed out to try to catch them was then attacked with javelins in the flank, in a repeat of the action at Lechaeum. All Caesar could do was order his men not to advance more than 4ft in front of the standards.[115]

Infantry

Light Infantry – Psiloi

Lighter Thracian infantry was armed with javelins, bows, or slings. Slings were often used in sieges, but their use in other circumstances seems to have been similarly limited. It is likely that some tribes specialized in the use of the bow or sling, while other tribes didn't use either. The vast majority of Thracian light infantry used javelins, and as some probably carried shields, they were probably little different from the peltasts. The lighter infantry were probably distinguished from the peltasts by their age, ethnic origins, physique, and/or extreme poverty. They would also show a reluctance to engage in hand-to-hand combat except in the most favourable circumstances, such as when pursuing a defeated enemy. The distinction between the peltast and the light infantry became more obvious after the end of the fourth century, with the appearance of the heavier-armed and armoured peltasts such as the Thracian *rhomphaia* men and the Iphicratean peltast.

In Greek warfare, the light infantry was usually deployed as a screen first, while the heavier troops arranged themselves. The light troops would skirmish with each other until the main battle line was in place, and then the light infantry would retire behind the heavier troops. For this purpose, they required absolutely minimal equipment – they could just throw rocks if necessary. As armies became more sophisticated and combats less stylized, light infantry were increasingly used in pitched battle. For this purpose they were equipped with javelins, or occasionally slings or bows, and some would also carry a dagger or sword if they could, but no armour was worn. Their light armament suited them to hit-and-run skirmishing tactics in loose formation. Being unencumbered, they were particularly useful in rough terrain, but even on the plains they could eventually wear

down and destroy a phalanx if there was sufficient room for them to keep falling back as the hoplites advanced. If caught in the open, however, they were very vulnerable to cavalry who could easily ride in amongst them and butcher them. Thracian light infantry were also at the mercy of their opponent's peltasts, who could easily catch up with them. They probably deployed on the flanks and (if armed with javelins) amongst the peltasts for protection.

Both bows and slings had a far longer range than javelins, and they could be very effective. To take full advantage of the superiority of bows and slings required greater training than throwing javelins. Even if wielded by the poorly trained, bows and slings still had a great advantage over javelins in the number of missiles a user could carry. When shot at a large body of men accuracy wasn't important. The relatively small numbers of slingers and bowmen compared to javelin-men in Thracian armies must therefore have had some other reason. This would most likely be a cultural one, backed by some practical incentive. It must have been easier to make and throw javelins than to make bows and arrows, or to learn to use a sling. To make a recurved composite bow might take a year. While bows had some association with royalty, only the lowest members of society learnt to use slings. Javelins were easier to make, more versatile, and could be used to defend you in hand-to-hand combat if necessary. In addition, javelins probably had a better record against armoured or shielded opponents.

Slingers

Slingers would have been herdsmen or shepherds from mountainous or hilly areas, very poor but agile men. Youths unable to carry the weight of other heavier weapons and armour might also be given this job. Slingers were particularly effective in sieges, mountainous or difficult terrain, and against elephants.[116] They were almost certainly a usual component of Thracian armies that included hill tribes. They are rarely mentioned in ancient sources. The first time they are referred to was in 404BC, when they fought on the side of the democrats in the Athenian civil war. Their hail of missiles helped to win a battle and oust the oligarchs.[117] Polyaenus tells how Iphicrates, campaigning in Thrace, was harassed by Odrysian javelins (one translation says archers) and slingers; he discouraged them by placing bound Odrysian prisoners in his front ranks, which persuaded their compatriots not to shoot:

> In Thrace, Iphicrates took many Odrysians captive. The Odrysians pressed him fiercely with slings and javelins. He set beside each of his

> men in the front rank a naked prisoner with his hands tied behind his back with thongs. Not wishing to hurt their relatives, the Odrysians stopped slinging stones and throwing javelins.[118]

That would have been between 365 and 357BC. They are last mentioned in 49BC, when Appian says Pompey recruited Thracian slingers for his fight against Julius Caesar.[119]

The Thracian slinger's equipment would have been limited by their status and income to the absolute minimum – a tunic that may not have covered their entire body, and a sling. The low social status of slingers is probably the reason why they are rarely mentioned by historians, despite the effectiveness of the weapon. There are only two references to Thracian slingers in ancient texts. They usually only formed about five per cent (or less) of a Greek army.[120]

Slingers were usually deployed in front of the main battle line, often mixed up with other light javelin-men and archers, or at least next to them. If a separate unit, they were usually stationed behind the archers, one indication that slings had greater range. After the heavier armed troops deployed, they would then fall behind them, and shoot over their heads.[121] Xenophon says that outside Athens in 404BC a great many slingers, who were most probably Thracian, were deployed in a third line on a hill. They were behind and above (Thracian) peltasts, javelin throwers, and Greek hoplites.[122]

The poorest and least skilled of the troops in an army did not even have slings: they just threw stones. Other Thracian light troops also probably threw stones whenever possible. There is only one known occurrence of a Thracian doing this – Homer says that the Thracian captain Peiros threw a jagged stone that struck down the Greek captain Diores.[123] Pritchett makes it clear that all grades of infantry threw stones but there were some who specialized in this art, and that it was a common practice, especially in sieges.[124] Tacitus says that the defenders of a Thracian fortress threw at the Romans stones, stakes with fire-hardened points, and boughs lopped from oaks.[125] It seems that among the light infantry there was usually a number whose sole weapon was the stones they could pick up from the ground, some of which could be quite large. These they threw without any mechanical assistance.

Archers

Archers were more common in Thracian armies than slingers, but were still

only a small proportion of the light infantry, and more likely to be found in armies of the northern tribes. Thracian archers were mixed with Cretan archers at the Battle of Pydna, suggesting that the Thracian archers were as good as the Cretans.[126] They are portrayed on Thracian art only in hunt scenes; other images of Thracian archers come from Greek pottery.[127] A fourth-century silver belt plaque from Lovets (northwestern Thrace) shows an archer with beard, Phrygian cap, composite bow, and pattern-edged tunic.[128] They would also have a quiver hanging from the waist belt, and possibly a curved dagger. The quiver would have held around 100 arrows, and would probably have been made from leather. The decomposed remains of quivers made of some organic material, most likely leather, have been found at a tomb near Vratsa.[129] A *gorytos* can be seen in use on one of the Alexandrovo tomb paintings, and a bow case can be seen on a third-century wall painting from the Muglish tomb, near Kazanluk, now in the Kazanluk museum.

The use of the sling and bow by the Thracians is further discussed in the chapter on weapons.

Javelin-men

Euripides' *Rhesos* and other sources refer to light infantry *(gymnetes*) or javelin-men that are distinct from peltasts. The javelin-men may have lacked shields, carried curved knives instead of swords, and carried a larger bundle of smaller, shorter javelins than the peltasts, but otherwise had the same boots, hat, and tunic. Certain tribes, like the Agrianians, specialized in javelin-men, but normally this troop-type would form up to thirty per cent of a Thracian army. Later javelin-men may have carried wicker shields, such as the *gerrha* among the Roman trophies after Pydna, and would then have been indistinguishable from peltasts.[130] Possibly the distinction between these troops was related to their more open order and complete unwillingness to get to grips with their opponents. The characteristics of the javelin are discussed in the chapter on weapons.



Fig. 29. Thracian peltast from an Attic red-figure kylix, 470–460BC.

Peltasts

Peltasts were a special form of light infantry that combined the mobility and skirmishing power of javelin-men with some close fighting value, making them excellent for chasing and catching other skirmishers, harassing the phalanx, or holding difficult terrain. In addition, they were far cheaper to equip and maintain than hoplites. Peltasts would run in, throw their javelins, and then run away, unless the situation favoured hand-to-hand combat. The peltast way of fighting was one of ambushes, hit-and-run raids, running and throwing or stabbing, of individual attack and of protective defensive massing. It was very similar to that depicted in the *Iliad*. Homer's description of Bronze Age warfare – individual warriors running out with javelin and sword, retreating just as quickly, stopping only to strip dead enemies – resembles Thracian warfare as carried out until the Roman conquest. Ajax throws his shield over his back as he runs away, just like a peltast. There are also references to 'winged' shields and a vase found at Mycenae, dated to 1200BC, shows spearmen carrying such shields (though they are larger than the pelte).[131] This has been suggested as a reason why peltasts were much more common in Greece than archers or slingers – they fit into Greek culture more comfortably.[132] Peltasts became so ubiquitous that later the term was applied to all light infantry, such as Akarnanian slingers, and (during the fourth century) their presence can be assumed even if not mentioned in the sources.[133]

The Thracian peltast was special because he was a ferocious fighter as well as a missile thrower. The ability to switch from skirmish mode and charge into hand-to-hand combat was shown in the attacks on Xenophon's troops in Asia Minor. Due to differences in equipment and armour, he came in five variations. They were sometimes mixed together and sometimes not. These were men armed with daggers, swords, or clubs, and long spears, javelins, or *rhomphaia*s. Peltasts also threw stones. The javelin was the most common weapon. The usual side arm was a curved dagger, as they were too poor to afford swords, but those too poor even to afford that used a club. The Bithynians in Xerxes' army were armed with javelins and daggers. Some used a thrusting spear, or sword, instead. The Thyni used clubs to break off Greek spearheads,[134] while the Dii, although armed with swords, were able to drive off Theban cavalry 'by using the tactics of their country'.[135] The latter suggests they were also armed with javelins or long spears or that the *'machaira'* they were carrying were akin to the *rhomphaia*. Thracian spears are further discussed in the next chapter.

Although there are several incidences of Greek peltasts throwing stones (and whatever else came to hand) there is only one known incident where a Thracian peltast did this. Homer says that the Thracian captain Peiros[136] threw a jagged stone that struck down the Greek captain Diores. It must have been a big stone thrown from a short distance with considerable force. The stone struck near the ankle of the right leg, crushing the bones and tendons. Evidently Peiros was only a short distance away, as he was then able to jump onto Diores and kill him with a spear thrust into his belly. Like his comrades, it seems Peiros was armed with a long spear, as he didn't throw his spear at Diores.

Peltasts had little or no armour, and their only protection was their eponymous small, light, wicker shield. This was usually crescent-shaped but might also be circular or oval.[137] This was called the *pelte* (plural *peltai*) in Greek, or *pelta* (plural *peltae*) in Latin. Greek pots provide our only visual record of *peltai*. Some sources mention bronze and even gold as materials used in their construction.[138] However, for the most part these small shields lacked a rim or any kind of bronze facing, and were made of perishable materials (generally a wood or wicker frame covered with goat or sheep skins).[139] Traces of such a shield made of some organic material, fixed with bronze nails, have been found in a tumulus near Debnevo in the Lovech district.[140] Most vase-paintings show the *pelte* decorated either with goat-skin markings, a simple face, eyes, animals (e.g. a lizard, an eagle), fertility symbols, or with more complex designs quite different to those on hoplite shields.[141]

Round shields are shown on a relief from the Apadana, Persepolis, on a stag head gold rhyton from the Panagyurishte treasure, and on a Bithynian coin. The Persepolis shield is very convex in section, and apparently made of uncovered wicker.[142] The Nicomedes I (279–255) Bithynian coin shows a large round shield, slightly smaller than an *aspis*, carried by the goddess Bendis, along with two javelins and a straight sword with scabbard and baldric. The shield is either decorated with circles of rivets, or perhaps has an embossed metal facing.[143] Athena's circular shield on the rhyton *(c.*300BC), has a sunburst design, and a wide rim similar to an *aspis*. This indicates that it is a standard depiction of Athena, who wears Greek dress, so this probably does not indicate Thracian use (even though two other figures on the rhyton wear Thracian or Phrygian dress).[144]

The use of the *pelte* and the peltast's lack of armour enabled him to evade the charge of heavily equipped troops and yet hold an advantage over lighter troops, such as archers, in hand-to-hand fighting. The *pelte* obviously had severe limitations, though, as it could only stop a sword slash or an arrow. It is unlikely to have been much good against a sword or spear thrust, or a thrown javelin. The shape of the *pelte* may seem odd for a warrior who was primarily to throw his spear. Having a cutaway to thrust your spear does not seem useful in that context. However, it may have made throwing a spear easier, as the person throwing could hold the shield up when leaning back for the throw, and also the right hand would not hit the shield when following through after casting the spear.

Light infantry were normally very vulnerable if caught in the open by a cavalry charge. They fought in a widely spaced formation that provided many places for cavalry to penetrate it. Heavier infantry packed in a tight formation act like a wall that a horse will not normally attempt to break through (though it may be trained to do so) and which gives the infantry the courage to stand up to the terror of a cavalry charge. Lighter infantry will be unable to stand up to the cavalry terror or run faster than the horses on open ground. The cavalry would catch them easily, and find it easier to kill them due to their lack of armour.

Peltasts also had to be wary of cavalry but being better equipped to defend themselves than ordinary skirmishers, did not always have this problem. For instance, the Dii swordsmen held off the Theban cavalry on their retreat to their ships, killing twenty of them in the process at small loss to themselves. Thucydides says they were able to do this by 'dashing out and closing their ranks according to the tactics of their country' but a more detailed explanation is necessary for this unlikely event. Possibly the Thebans were inferior in number, disorganized and/or incompetent (and

unfamiliar with dealing with this troop type). Alternatively the Theban cavalry involved were trained as skirmishers rather than charging cavalry.

Skirmishing cavalry were at a distinct disadvantage when up against foot skirmishers if they could not clear them away with a charge. Not only were they likely to be outnumbered, but they took up more space (and frontage) so could not even match their foot opponents, man for man, in the front ranks. This meant they could throw fewer missiles per unit length, a situation compounded by their inability to carry the same amount of ammunition (if armed with javelins – he had to hold spare javelins and reins in the same hand). Worse, they were likely to suffer more damage as they often lacked shields and were a larger (and more prominent) target. They even had a shorter range if armed with javelins, as they could not run and then put their whole body weight behind the throw.

By running along the front of the enemy line and each throwing their javelins at the same part of the enemy unit in quick succession they could perhaps achieve the effect of missile concentration on a single point. It is unlikely that this was practised, though, as it would require great determination and training, and all the while they would be subject to the missiles from the rest of the enemy unit. Shooting from a wedge formation might help, but it can be seen that the most effective tactic for the javelin-armed cavalry would be to charge the infantry skirmishers and hope that they would not stand their ground. Here the Thracian desire to get to grips with their opponents and willingness to charge would have helped make the Thracian light horse more effective than less-flexible light horse.

The vulnerability of javelin-armed cavalry in a shooting contest with infantry may thus have dictated the behaviour of the Theban cavalry at Mycalessus, and again at the Battle of Lechaeum. There the Spartan cavalry ran out and back, keeping level with the hoplites, instead of charging the Athenian peltasts and catching them while they were running away. One explanation for this is that the (shieldless) horsemen did not dare expose themselves to the enemy's accurate missile fire.[145] They were on the hoplites' right flank and stayed with the hoplites to maximize the protection the hoplites offered from the rain of missiles.

Xenophon describes (the mostly Thracian) peltasts in action against Persian cavalry at the Battle of Cunaxa in 401BC where they were serving as part of the mercenary force of Cyrus the Younger.

> Tissaphernes had not fled at the first charge (by the Greek troops), but had charged along the river through the Greek peltasts. However he did

> not kill a single man as he passed through. The Greeks opened their ranks (to allow the Persian cavalry through) and proceeded to deal blows (with swords) and throw javelins at them as they went through.[146]

Xenophon's description makes it clear that these peltasts were armed with swords, as well as javelins, but not with spears. When faced with a charge from the Persian cavalry they opened their ranks and allowed the cavalry through while striking them with swords and hurling javelins at them. They thus were able to survive the cavalry charge with minimal loss. The Persians opted to ride on to the enemy camp rather than again face the peltasts.

Against hoplites, the ancient historians repeatedly complain, almost pathetically, peltasts were able to inflict great damage at no loss to themselves. Peltasts had been encountered in Thrace since the seventh century and known in Greece since the sixth century but were rarely employed by the more advanced states such as Sparta and Athens. It was during the Peloponnesian War that the Athenians began to employ in large numbers peltasts from Thrace, and the Greek islands near Thrace. At the start this may have been fortuitous in that Thracian peltasts may simply have been easily available when light troops were needed.

In the summer of 429BC, an Athenian force of 2,000 hoplites, 200 cavalry, and a few local peltasts attempted to bring back the Chalkidian city of Spartolus into their empire. The hoplites defeated their Chalkidian counterparts, and drove them back inside their walls, but the Chalkidian cavalry and peltasts (probably including some of the local Thracians) defeated their opponents, and, reinforced by some peltasts from Olynthos, pushed the Athenians back to their baggage. Whenever the Athenians attempted a counter-attack, the peltasts and cavalry just danced out of their way; as soon as the Athenians resumed their retreat, they rushed after them, hurling javelins. Eventually the cavalry charged and routed the panic-stricken infantry. The Athenians lost 460 men and returned to Athens.[147] It was a great defeat and also the first battle in which combined-arms tactics (using cavalry and peltasts to support hoplites) were used against a hoplite force.[148]

It was at this time, in the last quarter of the fifth century, after the success of Thracian peltasts in campaigns in Thrace, that signal successes were enjoyed by the peltast arm in Greek service. During the Athenian invasion of Aetolia in 427 a large army of Athenian hoplites was heavily defeated by Aetolian javelin-throwers. They had survived quite well until their supporting archers ran out of arrows.[149]

In 425 at the Battle of Pylos/Sphacteria (on the shores of the southwestern Peloponnese) the Athenians defeated 420 Spartan hoplites. The Athenian force consisted of about ten times their number, of peltasts (some from Ainos in Thrace), sailors, hoplites, and light troops. The Spartan hoplites attempted to get into contact with their Athenian counterparts, but were driven back under the hail of missiles. It was the close cooperation of the hoplites with the light troops, in terrain unsuitable for hoplite actions, which spelt the Spartans' doom. Finally, when some Messenians got behind them, the Spartans did the unthinkable and surrendered.[150]

During 424–422 Thracian Peltasts figured prominently in Brasidas' campaigns and in the conquest of Amphipolis. While attempting the recapture of Amphipolis Cleon met his end when a Myrcinian peltast caught him while he was running away. Simultaneously, peltasts caused a rout with showers of javelins on shaky Athenian hoplites who tried to make a stand near Amphipolis. In 413 Demosthenes would lose his life to peltasts when he failed to take 1,300 Dii Thracian peltasts with him to Sicily. He fell to the rain of javelins from pursuing Sicilian light troops and peltasts.[151]

By the time of the march of the 'Ten Thousand' (401BC) Xenophon was able to use the tactics of Demosthenes and Brasidas to ensure the army's survival. Like Brasidas, when confronted by peltasts in difficult terrain, Xenophon ordered a select group to take the high ground ahead of the main force or, if it was already occupied, to attack the slope that was easiest to climb and take over that side of their path. Xenophon and Brasidas got their armies home by allocating the following tasks to peltasts: safeguarding of the route; ambushes; sallies; and pursuit of defeated enemy.

Long Spears

From the Bronze Age until the third century, some Thracian peltasts were armed with a single 3m- to 4m-long ash spear instead of the javelin.[152] Attic pottery images exhibit Thracians holding their spears in many poses: vertically, or crouching down and creeping along with their spears close to the ground, or sloped and resting on a shoulder, or level with the waist in a hoplite pose, or overarm. The most common pose is the spear being held vertically at rest, either with hand outstretched, or with the spear resting on the shoulder. The creeping peltast and the peltast holding the spear in an underarm thrusting pose are about equal in number, while the overarm thrust is the least common. These images are not limited to Attic pottery, as an unarmoured footman crouching down, holding a long spear with two

hands horizontally, is painted on the dome of the Alexandrovo tomb. There are also a few texts that mention Thracians armed with a *doru* (the hoplite spear) or *sarissa*.

It is not known how peltasts skirmished with long spears; they are shown on ceramics using one or the other type of spear in a mixed group but never both. Conversely there are no written references to separate bodies of Thracian spearmen and javelin-men. Thracians seem to have used both types of spear in either mixed or separate units. A mixed group would be able to present a front-rank hedge of spear-points when required and advance to hand-to-hand combat when the javelins ran out. Rhesos had 'many ranks of peltasts … arrayed in Thracian garb' which indicates they formed the peltast equivalent of a homogeneous phalanx.[153] This is the view of Best who sees the long spear-armed troops forming a sort of proto-phalanx.[154] The suggestion is that the peltast was the precursor of the phalangite although it is assumed that their phalanx lacked the density of the classical phalanx. There is no evidence that these spearmen carried javelins as well.

The archaeological evidence suggests that individual soldiers used spears of different types according to circumstances, like the pre-archaic Greek soldier.[155] Thracian troops continued to use outmoded Greek armour long after the Greeks had dispensed with it, as well as having beliefs and practices in common with the Archaic Greeks, so they may have continued to arm themselves in the same old fashion, too. It seems that the (admittedly highly trained) Macedonian pikemen would sometimes take a brace of javelins in place of their pikes to battle. If this is true then it seems likely that in earlier times the Thracians might change their arms as the situation demanded.[156]

Another possibility is that weapon use was divided along geographic and tribal lines, so that a few tribes preferred the long spear, one tribe the sword, while the rest used the javelin. The long spear may have been favoured in mountainous areas, areas where shooting ranges and mass volleys were restricted (e.g. in woods or narrow passes), and areas where there were many potential cavalry opponents.

There are no accounts of how the long spears were used. Clearly skirmishing with long spears would have been difficult, so perhaps these men stood back as a rallying point for the skirmishers, or for the cavalry. The javelin-armed troops would rush out to attack and then pull back into clumps for mutual protection, behind the spearmen. Then the javelin-men lobbed missiles from behind. This tactic would be especially useful against

threatened cavalry attacks, but could also assist their own cavalry. Cavalry could be a lot more effective if they were backed up by spearmen. Indeed, there are several occasions when foot assisted cavalry by following up an assault by Greek horsemen. Seuthes shows that he is aware of this when he asks Xenophon's hoplites to bring up the rear, behind the Thracian cavalry, in their first attack on some villages.[157]

When they were available, fast-moving long-spear-armed peltasts were ideal for this work. If the cavalry charge and/or missile storm failed to have immediate effect, the cavalry could retire behind the spearmen in preparation for the next charge (or to restock their ammunition). Alternatively if the cavalry charge was successful the peltasts would be able to charge in and amplify its effects. Having the large mass of men pursing them may also have helped secure the success of the cavalry charge, as this would help herd the horses towards the enemy, and thus encourage them to follow instructions despite their normal inclination not to do so.[158]

Victor Davis Hanson suggests that their loose formation would be useful for running down similarly poorly organized or fleeing men, 'the ground equivalent of the 19th century lancer who came into battle to mop up and ride down, more order than a mob, less than a column, with the advantages of more kills against the running or scattered than throwing javelins.'[159] This is what happened when the Bithynian Thracian peltasts fell upon Greeks of the Ten Thousand retreating across a river and routed them.[160]

We can divine some insight by looking at other (better documented) tribal groups in similar situations. For instance, the North Welsh took to raiding and skirmishing with long spears in hilly areas from around AD 1100–1400. This was a response to the deadly Norman cavalry, which (to begin with) easily defeated the local inhabitants. In 1075 the Welsh are described as being typically armed with a sword and a small shield, and being terrified of knights. Later, they are said to have had very long spears, capable of being thrown a very short distance with great force. They are described as having, amongst other weapons, javelins and 'hunting spears.' The North Welsh spearmen at Maes Moydog in 1295 grounded their spears and pointed them outwards to fend off the English horsemen. They preferred to fight in rough or marshy terrain and were very fierce in their initial attack, so that according to Giraldus Cambrensis battles

> were won or lost at the first onslaught. From their first fierce and headlong onslaught, and the shower of javelins which they hurl, they

> seem most formidable opponents. If the enemy resists manfully and they are repulsed, they are thrown into confusion. If there is further resistance they turn their backs without making any attempt at a counter-attack and seek refuge in flight.[161]

Their spirits were picked up by loud battle cries and war trumpets blowing. They survived through cunning so the shameful behaviour was in fact a feigned flight, which sought to lead their opponents into disabling terrain.[162] There were some interesting characteristics of Welsh warfare which have similarities to that of the Thracians. Just like the Thracians, the Welsh were apparently preoccupied with loot and were led by chieftains with very small armoured and mounted bodyguards. The Welsh military machine was a loosely organized, part-time, infantry force primarily designed to pursue feuds, and to engage in cattle raiding and looting expeditions. Thracian armies may also have had the same priorities – the defence of their own land and the acquisition of loot, rather than gaining new lands. The use of feigned flights shows how a long spear could be used effectively by skirmishing troops.

Some Thracian thrusting spears may have been especially long – about 4m (or 12ft). In 339BC Philip II was wounded through his right thigh by a Triballian *'sarissa'*, killing his horse, and laming him.[163] Minor Markle suggests that this was a cavalry spear, saying it is unlikely that an infantryman could pursue a man on horseback and achieve such a deadly attack. He may be right, but he ignores the terrain in which this encounter took place, which is likely to have made an infantry attack more feasible.[164] At a later date, a Median horseman was pierced by a Thracian peltast's *'sarissa'*, after the long shaft had already passed through the belly of the horse.[165] The peltast had crouched down, grounded his spear, and parried the Median's lance with his *pelte*.

A fifth-century gold ring discovered in 2000 from Chernozem Tumulus No. 1 (near Plovdiv) apparently depicts a warrior carrying a 4m spear underarm, with his shield supported by a baldric. Although the whole spear is not shown, the need for a strap around the neck to provide support for the shield indicates that the spear must be exceptionally long.[166]

The length of this spear is similar to that suggested by the Iphicratean reforms (discussed below), so it is thought that Iphicrates saw it on his Thracian campaigns. The spear of a hoplite is usually reckoned as being somewhat less than 6 cubits long, about 2.3–3m (7–9ft). Diodorus said the spear length was increased fifty per cent, so the Iphicratean spear would thus be 8 cubits long, or 4m (14ft). If the spear length was doubled by

Iphicrates, as Nepos says, this would give a length of 5m (14– l6ft) – like a *sarissa*. A Macedonian *sarissa* had a minimum length of 10 cubits, 15ft, and was normally 12 cubits or 5.5m (18ft) long, although later Hellenistic phalanxes apparently used pikes 14 cubits long.

The long-spear-armed Thracians could have encouraged Philip II in his development of the *sarissa*, either directly (having one stabbed into him!) or via Iphicrates.[167] Philip was closely associated with Iphicrates, who was his brother by adoption. Philip could not have helped but be aware of Iphicrates' reforms. Philip campaigned extensively in Thrace and must also have seen troops there armed with the longer spears. The theory is that through a process of experimentation he then made them longer.

Aelian recommends that *sarissas* be no shorter than 12ft (8 cubits or c.4m) – the length of an Iphicratean spear.[168] Nick Sekunda says that Philip II equipped his troops over the winter of 359/8 as an emergency programme, for which he could only afford the equipment of Iphicratean peltasts – helmets, *peltai*, greaves, and *sarissa*s.[169] He says that *sarissa* seems to have been a Macedonian word applied to the spear in general. Since it was an emergency measure, it wasn't an evolutionary reform stretching over a number of years but the use of existing equipment.

It is usually considered that Philip picked up many of his tactical ideas during his sojourn as a hostage in Thebes. He was held there for three years, came frequently into contact with Pelopidas and Epaminondas, and may have included the Theban victories after Leuctra (371BC).[170] It is possible that he got the idea for the *sarissa* from the Thebans. However, he met Iphicrates first, and Iphicrates was a trusted friend of his father who had saved his throne. He had seen Iphicrates in battle, and it seems Philip didn't go to Thebes until he was 14 or 15 years old. It would seem under those circumstances that Philip's battles against the local tribes and his involvement with Iphicrates would have been more important in encouraging the use of new weaponry.

It is not known exactly when Thracians stopped using long spears. Thracian long-spearmen are last reported in 322BC, when a Macedonian general sent some to arrest the Athenian orator Demosthenes.[171] There are many very large spearheads (about 40cm long and proportionately wide) displayed in Bulgarian museums (e.g. at Kabyle) dated to the Republican Roman period and perhaps these are from Thracian *sarissa*s (the only Roman candidate being those of the *triarii*).

Later Infantry Developments

The Peltast in the Fourth Century BC

In fourth-century Greece, peltasts, with their somewhat cheaper equipment, increasingly became the standard mercenary troop. They were often specialist mercenaries. The peltast established himself as the dominant species of light infantryman, displacing (but never completely) not only archers, but also slingers, who had been common in the fifth century. The increased use of peltasts changed the nature of warfare, which previously had been regarded by the Greeks as a sort of noble game. The employment of such men led to the citizen armies being used less frequently. With lack of use, the efficiency of the citizen forces inevitably declined. Peltasts were not suited to a fair and open battle, but rather to the ambush or surprise attack, preferably in difficult terrain. Also, mercenaries took a more professional view of warfare, so they regarded the use of any valid tactic as normal, even vital to their survival.

Spartan hoplites suffered greatly when in 389BC Agesilaus took two regiments plus many allied troops with him on a raid into Akarnania. Again the Akarnanian peltasts were able to inflict great damage on the Spartan force at no loss to themselves, although Agesilaus eventually prevailed when the peltasts stood to receive a Spartan charge, and the Akarnanian hoplites broke and ran rather than fight the Spartan hoplites.[172] Iphicrates' peltasts inflicted another defeat on Spartan hoplites when they ambushed Anaxibios' army in a pass in the Hellespont in 388.

Generally speaking, though, in the fourth century the battleground became more lethal for peltasts. Hoplites developed effective anti-peltast tactics: at least amongst the Spartans, the youngest and fittest hoplites, the *ekdromoi*, were selected to charge out of the phalanx and try to catch the peltasts.[173] Outside Sparta, Greek cavalry became more efficient and omnipresent, and were easily able to overcome peltasts when caught in the open. More frequent and longer campaigns gave commanders greater scope for experimenting with the increasing variety of troops. The Greeks created their own peltasts, specialized mercenaries flourished and peltasts were more likely to meet peltasts in battle. In place of the old amateur levy of hoplites, followed by a smattering of armed servants and a few mistrusted cavalrymen, the wealthier states at least were fielding more sophisticated combined-arms forces. These found it much easier to counter peltasts. They had sufficient light troops to protect their flanks and keep Thracian javelin attacks from worrying their heavy cavalry and infantry.

Cavalry were now the greatest danger to peltasts. In the course of the war in Boeotia (379/8) the Spartans employed peltasts to ravage the countryside, but after some initial success they were surprised and rounded

up by the Theban cavalry.[174] The same thing happened in 382/1 when the Spartans attacked Olynthos. A force of Olynthian cavalry rode out to challenge a Spartan army under Teleutias that was systematically destroying their farmland.

> When Teleutias saw them he was enraged at their audacity and at once ordered Tlemonidas, the commander of the peltasts, to charge them at the double. The Olynthians, when they saw the peltasts charging down on them, calmly retired and went back across the river. The peltasts, however, came after them in a mood of overconfidence, following them across the river as though they were pursuing troops in full flight. The Olynthian cavalry turned about and made their charge at the exact moment when it seemed that the peltasts who had crossed the river would still be easy to deal with, and there they killed Tlemonidas himself and more than a hundred of his men.[175]

A few years later the Olynthian cavalry, now allied to the Spartans, again found themselves being shadowed by peltasts and gave them similar treatment:

> But the Olynthian cavalry …wheeled round and, bearing down on the peltasts, chased them up a slope and killed great numbers of them; for men on foot are easily overtaken by cavalry when going uphill where riding conditions are good.[176]

Meanwhile, in Sparta, they had no need for cavalry. The Spartan hoplites' anti-peltast tactics worked so often that they jeered at peltasts and mocked their allies for fearing such despised opponents. They were therefore shocked when at the Battle of Lechaeum (in 391BC) the highly trained and organized veteran peltasts under Iphicrates' command were able to slaughter a Spartan battalion.[177] On that occasion the peltasts outpaced the hoplites and were able to run back and kill them with skilful casts from the side. It is thought that they were able to do this as they did not behave like Thracian peltasts – running out and back in clumps – but ran forwards and back all together, when commanded to do so. Other factors contributing to their success include some timely support by Athenian hoplites, the incompetence of the Spartan cavalry; and their superiority of numbers. They were also casting at the unshielded flank of the hoplites, at least to begin with, so their attack was more effective than it otherwise might have been. After this action, Iphicrates' peltasts were able to capture the towns of Sidos, Krommyon, and Oenoe from the Spartans.

The widespread introduction of Greek peltasts meant that Greek states hired fewer Thracian mercenaries from the fourth century onwards.[178] Indeed, Thracian mercenaries seem to vanish at this time – G T Griffith claims that 'There appears to be no trace of Thracian mercenaries in the seventy years before Alexander.'[179] Best disagrees, saying that Philip's conquest of Thrace reduces this to at the most fifty or sixty years, and that the period is not well documented.[180] Athens continued to try to hold territory in Thrace, and there were many Athenian expeditions to the region between 370 and 340BC – it seems unlikely that no local recruiting occurred. It is probable that specialist troops, and especially peltasts from Thrace, found service with the Greek cities of the mainland to augment their hoplite-based armies, while mercenary hoplites were in demand to arm the lightly armed levies of Persia and Egypt.[181]

During the fourth century BC, the term 'mercenary' became synonymous with 'peltast' even when it was not technically correct.[182] Mercenaries had become so ubiquitous that a comic play could feature the first soldier of fortune in history as its main character. Sadly only four fragments of this play, jointly entitled *Fortune's Child (Tychon)* and *The Soldier (O Stratiotes)* survive.[183] At this time there were several instances of Greek states having armies that included twice as many peltasts as hoplites. In 349/8BC there was even an Athenian army in Macedonia almost wholly made up of peltasts, though it was defeated, possibly due to lack of other supporting troops. One of the last references to peltasts in the fourth century BC comes from Xenophon referring to *akontistai* (javelin-men) and peltasts as synonymous.[184] Although the time referred to might be 374BC, the passage was probably written in the 350s (Polyaenus also refers to peltasts in the 350s in a passage dealing with the Theban Pammanes).[185] During the war with Philip of Macedon the mercenary armies were mostly kept separate from the citizen levies, so that the latter were all that were present at the final battle at Chaeronea (338BC). The mercenary army had been defeated already, at Amphissa.

After Chaeronea there was generally peace throughout Greece. The large armies of mercenary peltasts (or individual states to pay them) were unnecessary, as their role was now filled by the phalangites. The dual-trained Macedonian phalangites, when armed with javelins, may have also performed some peltast functions.[186] In addition, the dominant armies included significant forces of effective cavalry which were able to destroy any peltasts caught in the open, and filled the scouting, skirmishing, and pursuit roles formerly performed by peltasts. Consequently after 338BC Greek peltasts virtually disappeared from Greece and only found

employment in the armies of Persia, Thrace, Carthage, and Sicily.[187]

During Alexander's expeditions there are many references to mercenaries, but none to peltasts. It is assumed that the Agrianians, Thracians, Illyrians, and local troops fulfilled the peltast role, while the mercenaries were hoplites (possibly of the Iphicratean type). G T Griffith points out that the mercenaries were of the category 'those of the army who were more heavily armed' – meaning they were more heavily equipped than the Macedonian phalangites.[188] Greek peltasts were not needed again until the death of Alexander brought a reduction in the training standards of the phalangites and a need for more mercenary troops.[189]

From the fourth century, the peltasts' tasks became more varied and complex. Peltasts were increasingly used to dominate difficult terrain, or to form the link between cavalry and phalanx, or to operate as an advance guard.[190] This deployment is described at the Battle of Pydna, when Plutarch says 'First marched the Thracians,… Next the Greek mercenaries… Third… the *agema*.'[191] They were very valuable as flank protection to the phalanx as they could quickly change face to meet an outflanking manoeuvre and, if they could close up their formation in time, they stood more of a chance against cavalry attack than the lighter infantry.

Battles were now not always fought on open plains. This trend began in 379BC during Sparta's war with Thebes. Peltasts were used to secure the mountain passes through which invaders entered Boeotia and other peltasts were used to dislodge them.[192] Previously, peltasts had attacked the heavy infantry centre of a Greek army by skirmishing with them. Now peltasts were usually placed on the flanks of an army, where they would fight other peltasts. These opponents were now better armed and armoured. The Iphicratean reforms, if they took place, would have resulted in a tougher Greek peltast, or a hoplite better able to deal with peltasts, both of which would have required a Thracian response. In the third century, new heavier Greek peltasts also appeared – the *thureophoroi* and the armoured *thorakitai*.[193] Thus Thracian infantry took to wearing metal helmets and greaves and using the *rhomphaia*.[194]

The Iphicratean Reforms

In 374BC Iphicrates, the famous fourth-century BC Athenian general, is credited by Diodorus Siculus and Cornelius Nepos with reforming the equipment of his hoplites.[195] They now carried a smaller, round (or symmetrical) shield *(pelte*) and were called peltasts. Their new spears were half as long again or even twice as long as before. Sword length was doubled. He introduced a new lighter type of boot called the Iphikratid, and

linen corselets replaced the bronze cuirass. Diodorus rather vaguely implies that the changes were based on Iphicrates' campaign against Egypt.[196]

The nature of these reforms, and whether they occurred, has been hotly debated. In Greek armies the main infantry body of troops, the phalanx, continued to be made up of soldiers called hoplites throughout the rest of the fourth century, and it is uncertain whether these new peltasts existed outside one or two campaigns of Iphicrates. If they happened, Iphicrates is likely to have had Thracian practices in mind when embarking on these reforms. Some Thracian tribes were using especially long spears and long swords in the fourth century. Iphicrates is known to have campaigned for more than ten years in Thrace prior to his reforms, and fought both against and with Thracian peltasts. He even had a royal Thracian wife.

The Loeb translation of Nepos is as follows:

> For example, he changed the arms of the infantry. While before he became commander they used very large shields, short spears and little swords, he on the contrary exchanged *peltae*, or Thracian shields, for the round ones (for which reason the infantry have since been called peltasts), in order that the soldiers might move and charge more easily when less burdened. He doubled the length of the spear and increased that of the swords; he changed the character of their breastplates, giving them linen ones in place of bronze cuirasses or chain armour. In that way he made the soldiers more active; for while he diminished the weight of their armour, he contrived to protect their bodies equally well without overloading them.

This is what Diodorus says:

> Hence we are told, after he [Iphicrates] had acquired his long experience of military operations in the Persian War, he devised many improvements in the tools of war, devoting himself especially to the matter of arms. For instance, the Greeks were using shields which were large and consequently difficult to handle; these he discarded and made small oval ones of moderate size, thus successfully achieving both objects, to furnish the body with adequate cover and to enable the user of the small shield, on account of its lightness, to be completely free in his movements. After a trial of the new shield its easy manipulation secured its adoption, and the infantry who had formerly been called 'hoplites' because of their heavy shield, then had their name changed to 'peltasts' from the light *pelta* they carried. As regards spear and sword,

> he made changes in the contrary direction: namely, he increased the length of the spears by half, and made the swords almost twice as long. The actual use of these arms confirmed the initial test and from the success of the experiment won great fame for the inventive genius of the general. He made soldiers' boots that were easy to untie and light and they continue to this day to be called 'Iphikratids' after him.

Iphicrates' equipment reform is controversial because Diodorus' and Nepos' accounts are so brief, imprecise and vague. We do not have a contemporary source for this event, but only their later reports, which are so similar that they must have copied the same earlier source.

To determine what actually happened, we shall examine the four possible outcomes of these reforms:

(a) The first is that hoplites changed to peltasts.

(b) The second is the creation of a new style of hoplites – peltasts converted to (ersatz) hoplites; or that hoplites lightened their equipment but stayed hoplites.

(c) The third is that nothing actually happened, or at least there was no long term change.

(d) The fourth is that peltasts became heavier peltasts, with a new way of fighting.

(a) Hoplites who Became Peltasts

This argument fits the Diodorus/Nepos accounts best. Here the hoplites are discarding their equipment in favour of lighter versions of the same. The hoplites become peltasts, as Diodorus and Nepos say. Wicker shields were sometimes improvized for hoplites.[197] This fits the pattern of the time, when many states were converting their armies to peltasts or armies that had a significant proportion of peltasts. In the absence of a good number of cavalry, this was a logical way to ensure defeat of your opponent's army – to convert to a heavier form of peltast that can run down and defeat the conventional peltast.

J K Anderson suggests that the sword lengthened from the equivalent of a peltast's knife or a Spartan sword to that of a more typical hoplite sword – about 75cm.[198] For a peltast to have a longer sword than a hoplite, though, would be useful, and would suit their more open style of fighting. The helmet is not mentioned, but one of the newer styles (e.g. the *pilos* or the Thracian helmet) allowing good visibility and hearing is assumed to have been worn. The longer spear would in some way compensate for the lack of armour by giving an advantage over the conventional hoplite spear.

The lighter shoe would be an aid to mobility.

Both Parke and Best accept the idea of hoplites discarding bronze cuirasses for linen, even though the mention of chain mail corselets shows the passage to be corrupt/incorrect. There is a problem in the original source – and the practice cannot be attributed to Iphicrates as the change had already taken place. One suggestion is that Iphicrates took a force of Thracian hoplites as well as peltasts to Egypt and perhaps he was put in charge of some on his return, and it was they who discarded bronze cuirasses for linen corselets and became peltasts. Although Thracian nobles did still wear bronze cuirasses throughout the fifth century they usually fought on horseback so this is very unlikely.

Another problem with Nepos and Diodorus' statements is the unpeltast-like shield. The essential difference between the hoplite shield and the *pelte* was neither the size nor the fabric, but rather the shape and the presence of a rim. Peltast shields had previously been rimless, and scalloped or crescent-shaped, but Iphicrates made his *symmetrous*, i.e. round (or at least symmetrical). The *pelte*'s shape was previously helpful to a javelin-thrower. If javelins were not thrown, then a round shape (which offers better protection) could be used, and smaller size would have made it easier to carry a thrusting spear of the suggested length. It is interesting that an oval shape, which was a good compromise between the two, was used by *thureophoroi* and other troop types equivalent to peltasts.

Nicholas Sekunda gets around these problems by translating *symmetrous* as 'of the same size.' He says that Persian infantry (such as the *takabara*) were using such a shield, which was roughly the same size as a hoplite shield. This shield, the *taka*, which was made of leather and other materials, had a different system of handles, and was distinguished by the crescent cut out of the upper edge of the shield as an aid to visibility. Perhaps it was this Persian type of shield that Iphicrates borrowed (from his Persian allies on the Egyptian expedition) to equip his peltasts.[199] However the shield shape had changed, it still was rimless, whereas the *aspis* had a distinctive offset rim. A fragment of Aristotle (498 Rose) classifies a *pelte* as a shield without a rim. So these troops could continue to be called peltasts after their shield, even though they were not javelin-men of the traditional peltast type.[200]

Overall, attributing this change to Iphicrates is nonsensical. Apart from the problems listed above, hoplites continued to be used and there is a scarcity of references to peltasts after the middle of the fourth century.

(b) Nouveau/pseudo-hoplites: peltasts changed to hoplites, hoplites changed to light hoplites, or both

The new troop type differed from a traditional hoplite in that he had a smaller shield, longer spear, lighter armour and a longer sword. The lighter *pelte* could be strapped to the forearm, freeing the left hand to help hold the lengthened spears. The changes greatly increased the swiftness of movement. The argument is that the new type of troop described is a hoplite for all intents and purposes, despite being called a peltast. The new troop type still functioned as a hoplite because he carried an effective shield and long spear but without javelins he lacked the equipment to fight in the traditional peltast manner. It is therefore difficult to explain why such troops who were so equipped should be called peltasts.

The general rarity of references to peltasts in the sources between the time of Philip II and Alexander's Successors supports the contention that for about fifty years Greek mercenaries did not perform peltast-like functions. It is possible that as 'peltast' was synonymous with 'mercenary' in the early fourth century it may be that it was thought unnecessary to state whether mercenaries were hoplites or peltasts. Alternatively Greek mercenaries are mentioned many times during this period but were not described as peltasts because it was understood that Macedonians, Thracians, and Illyrians had taken their role as skirmishers.

The names 'peltasts' and 'hoplites' originally refer to the shield used.[201] However, the Greeks used the term 'peltasts' to describe not only light infantry carrying the *pelte*, but also more broadly any light infantry (with *pelte* or without), and also (later) any soldier, however armed, with a shield smaller than the large hoplite *aspis*. In other words, the term could be defined by function as much as by form. Hellenistic phalangites were described as peltasts.

It is possible that the name also indicated the troops' fighting style. Arrian called Illyrians, who could fight in close order, hoplites, but not Thracians.[202] To be called a hoplite the new style troops had to fight in close order (with long spears). Neither Nepos nor Diodorus mentions any close-order action. As we only have evidence that Iphicrateans fought in loose order, it would therefore be natural that they were called peltasts.

Alternatively, these troops, being mercenaries and well trained, may have been loose-order troops (equipped with javelins or long spears) able to fight in close order when necessary. This would greatly enhance their capabilities in their dual role, but the evidence for it is limited at best. There seems to be some evidence that Achaean foot could change between close and loose order as the situation demanded (e.g. the Battle of Caphyae,

220BC) prior to the reforms that Philopoemen made.[203] At the Battle of Cynoscephalae, Polybius says[204] Phillip ordered the peltasts and the phalangites 'double the depth and to close up to the right,' i.e. to form close order, *pyknosis*, by movement from left or right.[205] If the peltasts that Polybius was referring to were some sort of elite phalangites (and this formation change was common amongst phalangites), we are left with just the Achaeans having this ability. Plutarch says that when the Achaeans were armed in this way, they did not fight in formed units, but skirmished from a distance and were ineffective at close quarters.[206] Aetolian foot from the same period only seem to have been able to fight in open order. Alexander's hypaspists may have been close-formation troops able to fight in a looser formation when necessary and they form the nearest similar unit but they were an elite, specially selected for their nimbleness.

The naming convention may have been even broader as the term 'peltast' was an honorific title. The need for Iphicratean peltasts to have additional training to fulfil their multiple roles may have given them higher status, so that 'peltast' eventually became a name for elite troops. Diodorus says Antigonos

> selected the finest of his peltasts and divided the bowmen, the slingers, and the other *psiloi* into two parts … to occupy the places that were narrow and difficult.[207]

This sounds like a very ordinary passage until you realize that the peltasts must indeed have been of the finest quality (the best of the best), as this is the first time Diodorus refers to peltasts since the time of Philip II, and it is also the first time they are mentioned in Antigonos' army.[208] Similarly, one of the two times Polybius mentions the peltasts of the Seleukid army they are leading an assault through a breach in a wall – a task often given to elite troops. Ueda-Sarson says that there were other indications of their elite status.[209] Should Greek mercenaries undertake peltast-like functions, they could presumably once again be called peltasts.

More likely, although they were not like traditional hoplites and yet not quite peltasts, they looked like peltasts. A similar confusion of military terminology that describes troops like the Iphicrateans is the *peltophoroi:* because the Macedonian infantry shield was sometimes called the *pelte*, 'peltast' or *'peltophoros'* could be, and was, used for pikemen.

From inscriptional evidence Boeotia fielded citizen troops equipped as

> both *thureophoroi* and *hoplitai* until the 240s BC when the mixture changed to *thureophoroi* and *'peltophoroi'*. *Peltophoroi* has been most plausibly interpreted as being a descriptor for Macedonian-style pikemen; neither a traditional 'hoplite' (which they seemed to replace), nor the traditional skirmishing 'peltast' that carried the *pelta* over 100 years before (since 'peltast' would suffice to describe them), nor the more modern *'thureophoroi'* that they serve alongside, but rather as a *'pelte'* bearing pikemen, such as their neighbours the Macedonians employed.[210]

The confused nomenclature is perhaps to be expected from historians who were more concerned with literary flourish than accuracy and who may have shared the common disdain (and/or ignorance) of historians and other writers for things military (even in modern times mistakes like calling an armoured personnel carrier a tank, or an assault rifle a machine gun, are rife). They were also writing at a time when hoplites and peltasts did not exist. Such historians were not of the same calibre as Xenophon or Polybius but as the period is poorly documented they still have to be used as sources in discussions about the Iphicratean reforms. As Aelian puts it:

> The peltasts have similar equipment to the Macedonian, but lighter: For they carry a *pelta* and light-weight arms, and spears shorter than a *sarissa*.[211]

Asklepiodotos still uses 'peltast' to mean troops intermediate between phalanx and skirmishers and when used in histories it may occasionally mean the same thing.[212]

What we have then is new-style hoplites that were called peltasts. Such might be the force of 1,000 select Phocians 'called peltasts' raised by Philomelos in 355, at the start of the Sacred War.[213] If they were peltasts, you would expect Diorodus to say '1,000 peltasts' – the phrase indicates there was something different and unpeltast-like about them. In other words, they were some sort of in-between type and the Iphicrateans fit the bill perfectly. The peltasts mentioned in a decree of the Arcadian League from Elis are probably of this type, as may be Lucian's Mantineian *peltastikon*.[214] A grave stele from Athens shows a cavalryman riding down a helmeted infantryman who has a crescent-shaped *pelte* similar in size to an *aspis*. His spear has fallen off so it could be that he is an ordinary peltast but it is thought he is one of the Arcadian *peltastikon* being bested by Athenian cavalry during the Mantineian campaign of 362BC.[215]

The problem with some fourth-century troops still being called hoplites can be resolved if we say that peltasts and hoplites were being converted at the same time to new-style light hoplites. Then the troops referred to as hoplites had not been converted, while those referred to as 'peltasts' were reformed hoplites and reformed peltasts. This allows Diodorus and Nepos to call the new type of troop a peltast, and Xenophon and Diodorus to continue to call the troops used in the first half of the fourth century hoplites and/or peltasts. For example, Xenophon refers to Iphicrates' men after he manned his expedition to Corfu in 372BC as both hoplites and peltasts.[216]

Parke accepts that the Iphicratean reforms combined hoplites and peltasts to form one infantry type, with peltasts adopting the spear instead of javelins, and hoplites adopting the lighter shield of the peltast.[217] J K Anderson says that the long spears were for hand-to-hand combat and these troops were therefore hoplites.[218] Parke[219] says that Chabrias' famous stratagem of getting his men to adopt a half-kneeling attitude and await the enemy's charge with spears grounded[220] was just the tactic suited to the new type of non-skirmishing peltast, i.e. hoplite. Alexander's phalangites are often described as hoplites despite carrying a considerably smaller shield.[221] It is clear from their deployment that the mercenaries used by Alexander at Gaugamela were hoplites, not peltasts so that at that later stage hoplites of some sort were still in use.[222] If these hoplites could perform the peltast function (made even easier if they were armed with both long spear and javelin) it explains why peltasts are not referred to in the reigns of Alexander and Philip.

Tim Everson says that one possible reason for the Theban victory at the Battle of Leuctra was that the Thebans were using longer spears, of the Iphicratean model (and therefore the new style hoplites).[223] He says it seems most likely that the hoplite phalanx charged with the spear underarm, and a longer spear would have presented more spear points to the enemy. Against this it should be noted that in 377 the Thebans were certainly still using normal hoplite spears, as they threw some at the Spartans like javelins.

The idea that Iphicrates' peltasts converted to new-style hoplites is suggested by the need for additional hoplites in the eastern mercenary armies to counter the Egyptian heavy infantry.[224] The peltasts were not needed for their traditional shooting and skirmishing role as there were plenty of light troops available in the east who could do that. What was needed was a troop type that could stand up to the Egyptians, and also (given the numbers of peltasts and light infantry likely to be encountered)

chase the peltast and light troops off the battlefield. Hoplites that lightened their equipment would also be able to perform the latter role as well as pursue defeated opponents more rigorously. Pursuit was now more important, longer-lasting and more deadly than it had been when prosecuted by amateur citizen armies that ran away a short distance, acknowledged losing the battle then came back to pick up their dead.

The source for the reforms is also proposed to be the Egyptians.[225] They presumably fought like the hoplites, as they had linen armour, large shields and long 'naval' spears.[226] Of these, it is the spears that are the most interesting. Herodotus called the Egyptian spears *dorata te naumacha* (spears for sea-fighting).[227] There must have been something different about them, as Greek hoplites also carried long spears when fighting at sea. It is probable the Egyptians introduced cataphract (fully decked) triremes before the Athenians, and had made other modifications to their ships (like the Syracusans) that made them more suitable to boarding actions than ramming. In addition, the first quadriremes and quinqueremes appeared in Sicily between 400 and 390, and in Sidon in 351BC. Longer spears may have been necessary to get beyond the higher freeboard of these larger ships and to get an advantage in boarding actions.[228] Perhaps they were like the *dorudrepanon* or the extremely long boarding pikes used by Homer's Achaean heroes when defending their vessels.[229]

The problem with saying that these spears were of an Iphicratean length is that it is doubtful that Egyptian marines were able to hold their huge shields and (probably two-handed) 4m or longer spears at the same time. It is unlikely Iphicrates' peltasts ever used a two-handed pike like this – it would have removed the peltast's key attribute, their mobility. The only way we can make this at all credible is to say our sources are exaggerating the lengthening of the spear and that Iphicrates did make it longer, but no more than by Diodorus' fifty per cent. Spears up to about 3.6–4.2m (12–14ft) long can be managed with one hand, especially if used underarm (though with a smaller shield than that used by the Egyptians).[230]

Although Iphicrates didn't get the shield size idea from the Egyptians it may be that he had come across linen corselets on his campaign in Egypt, where the material originated, and brought back some to give body armour to peltasts for the first time, but there is no other corroborating evidence for this.[231] Even if he did, there would be nothing revolutionary about it, as some fourth-century peltasts seem to have worn both helmets and linen armour.[232] Also, linen corselets had replaced bronze cuirasses for most hoplites at the end of the sixth century. By the beginning of the fourth century, if not earlier, it is thought that the leather *spolas* was the main

body armour of choice, apart from cavalry and officers who wore a bronze cuirass. If saying that his troops converted to linen breastplates is not just an obvious error made by Nepos' and Diodorus' militarily ignorant source it must have been a special type of linen/Egyptian armour that was used.

There were three types of non-metallic armour worn by hoplites and peltasts – the *linothorax*, quilted linen, and the *spolas*. The first two were made of linen. The *linothorax* was made of linen or canvas glued together in thick layers to form a tough but flexible (and comfortable) piece of armour. This was the most popular armour worn by hoplites. It was cheaper than a bronze cuirass but still gave excellent protection. While strong, it was still not as durable as bronze, and mainly useful for warding off slashing blows or arrows, so it was often reinforced with bronze scales. These scales were applied in a band across the chest or abdomen. It was in use from the Persian wars to the beginning of the Hellenistic era.[233] Although it weighed less than the bronze cuirass it was still too heavy to be used by peltasts.

The *linothorax*, then, wasn't the armour promoted by Iphicrates. Most likely that armour was the quilted linen cuirass, worn by the Egyptians (at least in Herodotus' time). This was lighter, more flexible, and more comfortable than the *linothorax* (particularly in hot climates). It was probably cheaper and easier to manufacture, too. In other words, it was ideal for peltasts. Although not as strong, it was able to absorb blows, and if a weapon did penetrate it, the linen would wrap around the blade and get in between the weapon and the flesh. This prevented more serious wounds, and javelins and arrows could be removed by simply pulling on the linen around the entrance wound. This caused less damage than the usual method and, as long as the linen was fairly clean, could result in a faster recovery and an increased chance of survival. It became fairly popular, but as it wasn't as effective as the other types of armour, it was never as common.

Nevertheless, the Egyptians had shields too big for an Iphicratean hoplite; there is no evidence they had special shoes (though they did have long swords); and their armour had been around for some time, so they are an unlikely source of Iphicrates' inspiration.

One problem with the theory that the Iphikratid 'peltast' was in fact a light hoplite is that there are more depictions of fifth-century peltasts equipped in a similar manner than the very few known fourth-century representations of this troop type. Of the latter, there is only the Arcadian *peltastikon* mentioned above, and the Lykian sarcophagus of Payava (from Xanthos – modern Giiniik, southwestern Turkey). Dated about the same

period (375–360BC) it depicts a soldier carrying a round *pelte* but using a thrusting spear overarm. He wears a *pilos* helmet with cheek-pieces but no armour. His equipment therefore resembles Iphicrates' supposed new troops. A warrior depicted on a grave stele from Idomene carrying a small shield, and wearing a helmet and cuirass is a third possible candidate.[234]

The most difficult part of Nepos' and Diodorus' statements to fathom is where Diodorus says that

> actual use of these arms confirmed the initial test. The success of the experiment won great fame for the inventive genius of the general.

This immediately raises the question 'What "initial test" or "experiment"?' Luke Ueda-Sarson[235] has a convincing argument that the 'initial test' refers to the marines that Iphicrates worked with after his return to Athens from Egypt.[236] Iphicrates became commander of a fleet (for an expedition to Corcyra) on his return to Athens and the reforms are said to have taken place after his return from the East. Luke says that Iphicrates converted his lightly armed rowers and peltasts to the new model hoplite, having experimented with the relatively small number of his hoplite marines. Aboard ship a solid phalanx formation must have been impossible and individual action more important. The longer swords would have been more useful as they are more efficient in the single combats likely to develop on ships. A lighter shield would have helped a marine hoplite keep his footing (the ships were very unstable) as well as making it easier to hold a longer spear. Furthermore, the new decked warships were equipped with a railing which protected the lower legs of anyone on deck defending the side of a ship, making greaves unnecessary except when boarding an enemy ship.

> Iphicrates successfully campaigned with his fleet both in Korkyra, picking up a contingent of peltasts there, and also on the mainland nearby in Akarnania, a campaign that lasted some three years. Having decided the equipment was serviceable he then extended it to his mercenary peltasts. To convert a normal Greek peltast into an 'Iphicratean hoplite' would merely require the replacement of the peltast's javelins with a long spear, since they already had a *pelta*, and lacked greaves or other (heavy) body armour.[237]

Luke gives no indication of why the shoes should need to be changed, though the Iphikratids may have given better grip on slippery ships' decks, stayed on better when wet, and/or allowed sea water to run out of them

more quickly.

(c) There wasn't any change: the historians were mistaken, or it was just a temporary expedient measure

There are three versions of this argument. The foremost is that the changes were theoretical or didn't happen at all. The other versions are that the changes only happened to some marines; or that the peltasts merely had their equipment standardized. If a significant number of hoplites had changed to peltasts then you would expect to hear about peltasts more often, and less often about hoplites. The opposite is the case; the Greek histories recording the second half of the fourth century hardly ever mention peltasts. Demosthenes mentions Philip had hoplites and mercenaries, but not hoplites and peltasts. Arrian and Diodorus also often mention mercenaries but do not refer to peltasts in their accounts of Alexander's campaigns.[238]

Tim Everson calls the text on which Diodorus and Nepos based their work a 'frill of errors.'[239] He says that only an author completely ignorant of military practices of the fourth century BC would say that hoplites became peltasts. These two infantry types had co-existed since the Peloponnesian War. Best says that the javelin had previously been a peltast's standard equipment and was unlikely to have been thrown out (no pun intended!).[240] He thinks that the Iphicratean peltast was armed like the Thracians – with some peltasts being armed with long spears, and some with javelins. Duncan Head says that there was no evidence for any new or reformed type of infantryman actually seeing service and perhaps Iphicrates' reforms were never put into effect.[241] There is plenty of evidence that hoplites continued to be equipped in the traditional manner, both during Iphicrates' lifetime and long after, right until the demise of the Greek cities as independent states.[242] Accordingly, it is normally assumed that Diodorus and Nepos are both mistaken in stating it was hoplites that were re-equipped.

The second version of this argument is that the changes were just a temporary expedient measure, introduced in response to a particular situation which did not repeat itself. J K Anderson suggests that the introduction of the 4m (12ft) spear was a response to the Egyptian heavy infantry, which Iphicrates had been hired to fight.[243] The peltasts in his army were inadequate for the purpose, so he gave them the new weapons. However, we are told the reforms took place *after* Iphicrates got back from Egypt, so while in Egypt his troops did not get reformed in this way.

Another ad hoc measure at another time saw Iphicrates using troops

from the fleet as hoplites. If (as suggested by Luke Ueda-Sarson) only the marines were reformed after Iphicrates got back from Egypt, the vast majority of hoplites would have been totally unaffected. The marine hoplites were never very numerous – ten per ship, i.e. never more than 4,000 in the entire Athenian military.[244] Luke asks if only the marines were reformed, why then is it detailed in two separate sources? Possibly the reason is that the two sources were based on one source.

The changes were definitely not a temporary measure at least in respect of the footwear because the boots would not have had a special name and survived for so long if the change was trivial and unregarded. Diodorus says

> He made soldiers' boots that were easy to untie and light and they continue to this day to be called 'Iphikratids' after him.[245]

These boots are often neglected in this debate – why did the footwear need to be changed? There are two possibilities: they helped a hoplite keep his footing in the press of a hoplite-to-hoplite struggle, or they made running and crossing broken terrain easier for a peltast. In the former case it may be that it was important to be able to quickly unlace a shoe as one damaged in combat might cause you to lose your footing or trip over it.

The second case would seem more likely as it is thought the shoe was some sort of open sandal that laced up around the leg (somewhat like the Roman *caliga*), as portrayed by Warry.[246] This type of shoe would surely favour a peltast. One suggestion is that they might have provided some slight protection for the legs, since it is presumed that the Iphicratean peltast/hoplite did not wear greaves. The tough leather strips of the Iphikratid provided more protection to the foot and lower leg than the soft Thracian boot.[247] Following the Thracian influence hypothesis, it has also been suggested that these boots were in fact a modification of Thracian boots, but such boots would have been too hot to wear in Egypt, and already had a name – '*embades*.' If they were too similar to Thracian boots, they would not have had a special name that survived for a long time.

However, Tim Everson doesn't think the boot was anything special. He says

> the Iphikratid boot sounds very much like the high boots often worn by peltasts as early as the fifth century, and there is no reason why it should not have been worn instead of greaves. It may have been adopted from the cavalry boot mentioned by Xenophon.[248]

If the changes were implemented in the peltasts, then when these new-style peltasts met the traditional peltasts, they would have beaten them. This would have caused a change in the overall equipment and fighting style of peltasts so that they all became the new type and any advantage was nullified. Then you have a situation where there is no need for the new type of peltast and as it requires too much training, it disappears. It would have disappeared because the new type of peltast may have needed the sort of continuous training and leadership that Iphicrates gave – training to fight with a long spear and a javelin, training to fight in close as well as loose order, training to fight hand to hand, training to skirmish, training to hold ground, training to fight off cavalry. Keeping the peltasts employed continuously also cost a lot of money. Perhaps this type of peltast disappeared when less energetic generals were in command and Persian subsidies were absent. Only the footwear survived in the long term, as this didn't require any special training or leadership.

Another form of this argument is to say that any change was not apparent as it was merely the culmination of a gradual process and a standardization of existing equipment. Parke says this is the view of those that say that the smaller shield already existed.[249] He even suggests that Chabrias experimented with parts of the equipment (e.g. the longer spear). He says that the Chabrias incident mentioned above (the peltasts grounding their shields and holding off Spartan hoplites) occurred in 478, while Iphicrates was in Egypt in 474, so either the dates are incorrect or at least some changes were already in place.

As explained above, a thrusting spear was sometimes used by Thracian peltasts in the fifth century, before Iphicrates' time.[250] As no battle accounts actually describe peltasts using thrusting spears it may be that they were sometimes carried by individuals by choice rather than as part of a policy or reform. It may be that all Iphicrates did was make the practice more common by making it customary amongst his troops, so this was not a revolutionary reform. Thrusting spears are included in some vase-paintings of peltasts and some peltasts may have carried them as well as javelins rather than as a replacement for them (they are often depicted carrying only one javelin when they plainly carried more than one spear). In Thracian use these spears were long enough to be called *sarissa*s at least from the mid-fourth century to sometime in the third.[251] Best says that Nepos and Diodorus seized on the long spear-armed peltasts, as the kind of peltasts they knew of, to explain the success of the peltasts over their more favoured citizen foes.[252]

(d) Peltasts became heavier peltasts: light-infantry peltasts whose way of fighting was somehow changed

The last argument is that the change was to a new type of peltast who had more armour, longer spear, similar sized shield, longer sword, and different boots. This would enable him to partially fulfil the hoplite role, as well as fight better against other peltasts. Best's discussion provides the essential insight: peltast equipment had always been mixed, and some Thracians, the original peltasts, had carried a long spear.[253] This argument is the most plausible; it means that the essence of the reform was making the *pelte* round rather than crescent-shaped, lengthening the swords and giving some peltasts a longer thrusting spear. As previously noted, Thracian peltasts underwent a similar change to heavier equipment.

Some scholars say the reforms may have included armament with both javelins and a long spear, an armament suitable for a heavier, multi-role peltast. Illyrian infantry, seventh-century hoplites, and Roman *velites* are also supposed to have been armed this way (though with the shorter, conventional 3m spear).[254] Duncan Head says that the *thureophoroi* (who took over the peltast role) had both long spears and javelins, so they may have been using a long-established practice. In addition he says that Maccabean infantry fighting during the Jewish revolt are also said (in the Dead Sea Scrolls) to have been armed this way. Luke-Ueda Sarson disagrees with the latter– he contends that this is a misunderstanding of the text. Also, Nepos actually says that the short spears *(brevibus hastis*) were replaced (not supplemented) by longer spears.

Anderson (p. 130) and Parke (p. 80) say that it must have been impossible to hold a 12ft spear and simultaneously throw javelins and therefore this change probably wasn't part of the Iphicratean reforms. Experiments by re-enactors have confirmed this – they show that throwing a javelin effectively while balancing a shield and a spear in one hand and hurling it with the other is very difficult. Duncan Head says that there is no evidence that the long spears were any commoner after the reforms than before, or that the 4m type was ever used.[255] No battle accounts speak of peltasts using spears, so they may not have been standard equipment.[256]

There are, however, two instances where Macedonians can be shown to have carried a thrusting spear and a javelin at the same time. The first is a Macedonian officer in Alexander's army who fought a staged duel armed with both a pike and a javelin; the second is Demetrius 'the Besieger' who used spear and javelin together when fighting aboard his flagship at Salamis-in-Cyprus.[257] In addition, Plutarch says Achaeans armed with spears and *thureoi* were effective fighting at a distance, which implies they

were armed also with javelins.[258]

Parke says[259] that there were a few things about the Iphicrateans that were different but not controversial.[259] These were Iphicrates' emphasis on discipline, esprit de corps, continuous training, and elimination of idleness. Thus to be called an 'Iphicratean' became in itself a mark of renown.[260] Such practices were also adopted by Philip II and the improvement in training could be seen right through to the end of the Hellenistic age, for instance in the orderly movements of the peltasts and phalangites at the Battle of Cynoscephalae.[261] The extra training may have included using a spear or a javelin as the situation demanded.

The major change introduced then did not involve any dramatic change in equipment – in fact, the change was the introduction of discipline into peltast formations – instead of clumping and moving in and out as they individually saw fit, the peltasts now moved in and out together. The peltasts became a more effective and professional unit with greater resistance to cavalry and greater striking power.[262]

What would have happened when the new-style peltast met a force of traditional hoplites? One feels that they probably thought they were not up to the job of a straight-out, stand-up fight. The combat outcome would be uncertain, with an even chance of a hoplite win. The peltasts would have had to adopt traditional peltast tactics – skirmish or attack the flanks. The peltasts would not be able to skirmish for long, due to their heavier equipment, and then they would have to rely on the extra length of their spears to compensate for their lack of armour and smaller shields. They would have liked to have caused some damage with javelins before engaging the hoplites in hand-to-hand combat. This argues that they were armed with both javelin and extra-long spear somehow. A win by the peltasts would be unlikely to cause a change throughout the hoplite arm to the new-style peltast panoply though, as the citizen militia hoplite did not have the time to train sufficiently to achieve the level of skill required to meet the requirements of the new type of peltast.

Thureophoroi

To be better able to compare and contrast the later Thracian infantry with their contemporaries, and the fate of the peltast, we will now discuss the last types of Greek peltast – the *thureophoroi* and *thorakitai*. The *thureophoroi* (singular *thureophoros*) were common in Hellenistic armies of the third to first centuries BC, and typically carried a *thureos* and most probably a long thrusting spear, javelins, and a sword. The *thureos* was generally smaller than that used by their Celtic or Roman opponents.[263]

They also commonly wore an iron or bronze Macedonian helmet. Their equipment was like that of the eastern Gauls and they first appeared after the Galatian invasion in 279BC. The introduction of this troop type is thus usually attributed to the encounter with the Gauls but it could also have been due to the influence of Pyrrhus of Epirus (who saw Italian tribes similarly equipped).

The *thureophoroi* were rated among the light troops, *euzonoi*, and were similarly used as skirmishers.[264] Their roles included the ones familiar to peltasts: leading the column of march in difficult terrain, participating in forced marches; screening the heavier troops; and supporting lighter troops. In the sources they are usually distinguished from both skirmishers and the phalanx and seem to have operated in a role intermediate between the two types. They probably formed up for battle in files eight deep and skirmished in open order.[265] For close combat they tightened the ranks to *pyknosis*. Thus, although unable to stand up to the pike phalanx, they were capable of occupying a place near the centre of the line of battle. For instance, Polybius says Molon stationed between his cavalry wings

> the *thureophoroi*, the Galatians and in general all his heavy-armed troops. His archers, slingers and all such kinds of troops he posted beyond the cavalry on both wings …[266]

In the third and second centuries BC, 'mercenaries' that were not otherwise described are often mentioned and it is thought that these troops were most likely *thureophoroi*. At Mantineia in 195 the Spartan 'mercenaries' supported the light troops but were lighter armed than the citizen pikemen. They fought with javelins.[267] Representations of troops equipped with *thureoi* from the Hellenistic kingdoms usually show them equipped with a single spear but Plutarch describes Achaean citizens equipped with the *thureos* as skirmishing at a distance like peltasts and also as having spears. Luke Ueda-Sarson resolves this conundrum by suggesting the spear was the preferred weapon and the javelin could be used, but not both at the same time. He says the javelins were held by an attendant (or presumably in the baggage) until needed:

> The unique tombstone of Dionysios the Bithynian, from Ptolemaic Alexandria and probably dating to the middle of the 2nd century BC, shows the deceased carrying a spear as normal, but he is accompanied by an attendant carrying two javelins and his master's *thureos*[18] The fact that it is his attendant that is carrying the javelins is I believe of

significance: his usual weapon was the spear, though javelins could be used in its place, but both were not carried simultaneously.[268]

Thureophoroi are frequently illustrated in grave paintings from Alexandria and Sidon, and in (possibly Parthian) terracottas from Seleucia on the Tigris.[269]

Thorakitai

A *thorakites* (pl. *thorakitai*) was a soldier equipped in a manner similar to the *thureophoroi* who may have worn a lighter version of the Celtic mail shirt (it was shorter and didn't have shoulder pieces), and carried a larger (and doubtless stronger) shield. The mail was introduced as a result of either Roman or Celtic influence (these men were equipped somewhat similar to the *triarii*). Like the *thureophoroi*, they probably had javelins as well as the spear.[270] Depictions of *thorakitai* include the tombstone of Salmas of Adada found in Sidon, and the Kampyr terracotta from Bactria. They date from the late third to the middle second century BC, and show a man carrying a spear or a sword and wearing a mail shirt.[271]

The *thorakitai*, being armoured, were obviously expected to fight in the front ranks, and would have benefited from a larger shield.[272] Evidence of two such shields has been found. The first is a late-second-century example from Fayum in Egypt that measures 128 × 63.5cm. It was constructed of three wooden layers 2–3mm thick, protected by a spine and boss, and covered with felt. It probably weighed 10kg.[273] The second is a wide imprint of a 130cm high *thureos* dated around 150BC, found in Bactria.[274] These may be compared to the 1.1m-long Celtic shields found at La Tene and the 90 × 65cm Dolna Koznitsa shield mentioned above.[275]

Thorakitai are first referred to near the end of the third century. Polybius alludes to them twice in the Achaean army (distinguished from both the pike phalanx and the light troops) and once in the Seleukid army. They were used to back up light infantry, sometimes on steep hills, and were usually alongside the *thureophoroi*. They were often arrayed with the Illyrians, usually fighting between the phalanx and the light troops.[276] It would seem fairly clear, then, that the *thorakitai* were the final development of the peltast in Hellenistic armies.

There are some alternative views. Luke Ueda-Sarson suggests they were hoplites with cheaper equipment, who had abandoned use of the phalanx.[277] Most Roman authors thought they were imitation legionaries. Nick Sekunda interprets the Kampyr terracotta figure, likely dating from 170 to 145BC at the latest, as an imitation legionary[278] but Luke says it

seems much more likely it is simply a *thorakites* using his sword rather than his spear.[279]

It is lucky for the Thracians that they were an uncommon troop type as their heavier armour and shield would have given them a good chance against even the heavy Thracian peltasts. After the Roman conquest the troop type continued to exist as Roman *auxilia* and in the national armies of various barbarian nations, e.g. the Spanish. Included amongst the Roman *auxilia* were, of course, many Thracians.

The Thracian Army in Britain

After Thrace became a province in AD 46, troops raised there fought throughout the Roman world, including Britain. Evidence for five Thracian units has been found in the UK, though there may have been eight (cohorts I–VII plus the *ala*). A few were raised early enough to have fought as auxiliaries for the Thracian client kingdom. There were also some Dacian units. It is possible for their modern descendants to be traced, as some of the ancient troops carried a genetic marker (the 'M78α' cluster mutation of the 'E3b' haplogroup) that only existed in the northern Balkans at that time, and most British people come from two other groups.[280] Apart from any putative descendants, the best-preserved evidence is a tombstone of a Thracian cavalryman, Rufus Sita (presumably he had red hair like his ancestors) of the Sixth Thracian Cohort. It was found in Gloucester and is now on show in the city museum.[281] Nothing else is known about the Sixth Cohort.

Cohors I Thracum

The First Cohort of Thracians *(Cohors I Thracum*) is believed to have been first stationed in Britain at the Wroxeter auxiliary fort, just to the south of the city of Viroconium, where the tombstone of a trooper in the 'Thracian Cohort' was discovered. This tombstone is now on display in Shrewsbury's Rowley's House museum.[282] This part-mounted unit were an ideal choice to man this important crossing of the River Severn and were probably stationed here during the early campaigns of the governor Ostorius Scapula. They were involved in the building of Hadrian's Wall during the AD 120s, and are later attested at the Bowes fort in County Durham in the early third century.[283]

Evidence for the Cohort in Britain

Burn 95; *CIL* XVI.48; military diploma, dated: 19 January AD 103
Burn 100; *CIL* XVI.65 military diploma dated: 17 July AD 122

AE 1997.1001 diploma dated 27 February AD 158
Wroxeter *(RIB* 291 tombstone with cohort numeral missing)
Hadrian's Wall between Newcastle and Benwell (*RIB* 1323)
Birdoswald (*RIB* 1909; B.I. shared with *Cohors I Aelia Dacorum;* dated: AD 205–20
Bowes (RIB 730 altar AD 197–202; 732–4; 740 AD205–8; 741).

Cohors II Thracum

Cohors II Thracum was part-mounted and contained a nominal 500 men. The regiment was probably stationed in the fort at Mumrills in the middle of the second century. They are later attested on the Cumbrian coast at Moresby in the *Notitia Dignitatum*, and this documentary evidence is backed up by various undated epigraphic evidence from the fort.[284]

Evidence for the Cohort in Britain

Burn 100; *CIL* XVI.65 military diploma dated 17 July AD 122
Mumrills (*RIB* 2142 tombstone)
Moresby (*RIB* 797 base; 803; 804 tombstone; *Notitia Dignitatum*).

Cohors VII Thracum

Cohors VII Thracum is known only from diplomas dated between AD 122 and AD158.

Evidence for the Cohort in Britain

Burn 100; *CIL* XVI.65 military diploma dated: 17 July AD 122
AE 1997.1779b diploma dated *c.*AD126
AE 1997.1001 diploma dated 27 February AD 158.

Ala I Thracum

The *Ala I Thracum* (First Wing of Thracians), a mounted unit, were most probably raised during the AD 30s and then posted to Germany. From there they redeployed to bolster the invasion army of Claudius in 43. It is thought that the unit had already been moved elsewhere by 61, and they are next identified at Cirencester immediately afterwards. The military withdrew from Cirencester in the late 70s, and it is possible that the unit were kept in reserve in South Wales until their withdrawal to Lower Germany by the mid-second century, where they apparently were to remain.[285] A Thracian shrine has been excavated in Dorset.[286] Whether it was associated with this or another unit is not known.

Evidence for the *Ala* in Britain

Burn 95; *CIL* XVI.48; military diploma, dated: 19 January AD 103
Cirencester, Gloucestershire; *RIB* 109; tombstone; *c*.AD62
Caerleon, Gwent; *RIB* 2415.39; stamped bronze *trulla;* Flavian?
Colchester, Essex; *RIB* 201; tombstone; probably pre-AD 49.

This is the tombstone of a Thracian auxiliary cavalryman by the name of Longinus Sdapeze, dated around AD 60 and perhaps thrown to the ground in disgust by Boudica's forces during their rampages. The original can be seen within the Castle Museum in Colchester. It is in almost as good a state of preservation as that of Rufus Sita.

The inscription reads: Longinus Sdapeze, son of Matygus, from the town of Serdica, *duplicarius* of the *Ala I Thracum*, 40 years of age, served fifteen (years), lies here. His heirs erected the tombstone, according to his will.

Or, in other words, 40-year-old Longinus Sdapeze was the second in command of a *turma* in a Thracian cavalry unit. He was born in what is now Sofia. It reveals that he was a *duplicarius*, one of the highest-paid cavalry positions. Longinus died in AD 49, soon after the invasion in 43, suggesting that he may have come to Britain with Claudius' invasion force, and possibly marched into Colchester in the emperor's procession. It is one of the oldest Roman gravestones in Britain.

The tombstone shows fine detail of his attire, in particular, detail of the scale-armoured cuirass *(lorica squamata*), a Coolus helmet, an oval shield and the elaborate bronze *phalerae* covering the strapping on the horse's harness. A fallen warrior (presumably a Briton) is in a foetal position being trampled underneath his horse.[287]

Thrace was one of the most important recruiting grounds for the Roman army, with 38 regiments, *alae* and *cohortes* originating there. Only the Spanish (54), Gallic (42) and Near Eastern (41) provinces raised more units. They were found all over the empire and Thracian drafts also filled the ranks of other regiments (eg some Gallic and North African regiments included Thracians). Many were first raised before Thrace became a province, and troops raised there had a tendency to return to their home territory when they were discharged. Several were issued with honorary titles as a reward for their bravery. The Thracian units had a high proportion of cavalry - in addition to the 12 *alae*, 16 of the 26 infantry regiments were *equitatae*. This added up to about 21,000 men, comprising 9,000 cavalry and 12,000 infantry, at any one time. Three of the cavalry regiments were horse archers, and there were two infantry archer

regiments.[288]



1. A late Bronze Age/early Iron Age Thracian warrior painted on a fragment of a fresco. This is presumably how Homer thought Rhesos and his bodyguard were attired, though in reality they would have had boar-tusk helmets. (National Museum of History, Sofia; Author's photograph).



2. Orpheus playing his lyre between two Thracian warriors on an Attic red-figure pelike from about 440–430BC. The warriors are exactly as described by Herodotus, with boots, colourful cloaks and fox-skin hats. Underneath the cloak they wear a knee-length sleeveless tunic. The knives described by Herodotus may be concealed but here each is equipped with a long thrusting spear. (British Museum; Author's photograph).



3. Part of a 5th–6th century gilt silver belt from Lovech, Stara Zagora district: a royal wild boar hunt by heavy cavalry and archers. The mounted warriors are wearing leather armour with pteryges. This rider appears to have a circular shield. The archer has a composite reflex bow, a Thracian cap and a fringed tunic.



4. Traditional Thracian light cavalryman from a 5th-century BC red-figure pelike found near the Bulgarian Black Sea town of Sozopol (formerly the

Greek colony of Apollonia Pontica). His shield flaps around on his back, as he is travelling to a battle and not using it.



5. This Thracian peltast, following the rider on the Sozopol vase above, is clearly shown using his shield. Note the thigh-length lace-up boots, pointed hat, pair of javelins and his arm thrust through the cross-straps on the rear of his shield. *(Author's photograph*)



6. Thracian cavalryman in typical garb and carrying a shield, from a 5th-century BC red figure vase found near Karnobat, Burgas District, Bulgaria. Again the cavalryman has a shield flapping around on his back, but here the peltast following him does the same. The Karnobat and Sozopol vases probably came from the same workshop, so the depiction of the peltast's shield sticking out at a 90 degree angle must have been intentional, not due to lack of the skill to show it in use. *(Author's photo*)



7. (**Above**) and 8. **(left**) The Karnobat vase has a cavalryman and two peltasts marching to battle. The leading figure, urging the other two men

on, faces us, so the shield he carries on his back cannot be seen. *(drawing after L Ognenova-Marinova; Author's photo*)





9. (**Above left**) A Chalcidian helmet, the most common type found in Thracian graves. This is the older variant, with fixed cheek pieces. *(courtesy of Blagoevgrad Museum*)

10. (**Above right**) A Thracian helmet with cheek pieces moulded to look like a beard in the National Museum of History, Sofia. *(Author's photograph*)



11. **(Left)** A 4th-century BC iron, gold and leather collar from Golyama Kosmatka tumulus. *(Author's photograph)*



12. Late fourth/early third century Thracian helmet, bronze greaves, three bronze torques and an iron *rhomphaia* found together near Blagoevgrad

and dated circa 400BC. The *rhomphaia*, which originally had a wooden or bone-covered handle, was found in fragments but later restored. The *rhomphaia* had a single edge, with two grooves running parallel to it. It was found on the right side of the skeleton, lying just as it was held while its owner was alive. The helmet had a sheet of bronze, moulded to imitate beard and moustache, designed to cover the lower face. The top of the helmet was made of iron sheets joined with iron bands and rivets. The greaves are of the cheaper mass-produced Hellenistic type, held on by straps behind the shins.



13. One of a pair of recently discovered late 4th/early 3rd-century BC gold sword sheath ornaments from Golyama Kosmatka tumulus. The sheath was made of iron, wood and leather.

The appliqué is thought to show Ares with a snake (or thin rope) wound about his spear. He is dressed as a cavalryman, wearing Chalcidian helmet,

sword and belted linothorax, but no greaves or shield. Underneath is a short chiton with short sleeves. He has long, wavy hair. His spear is probably a javelin, as it is only slightly longer than he is tall.



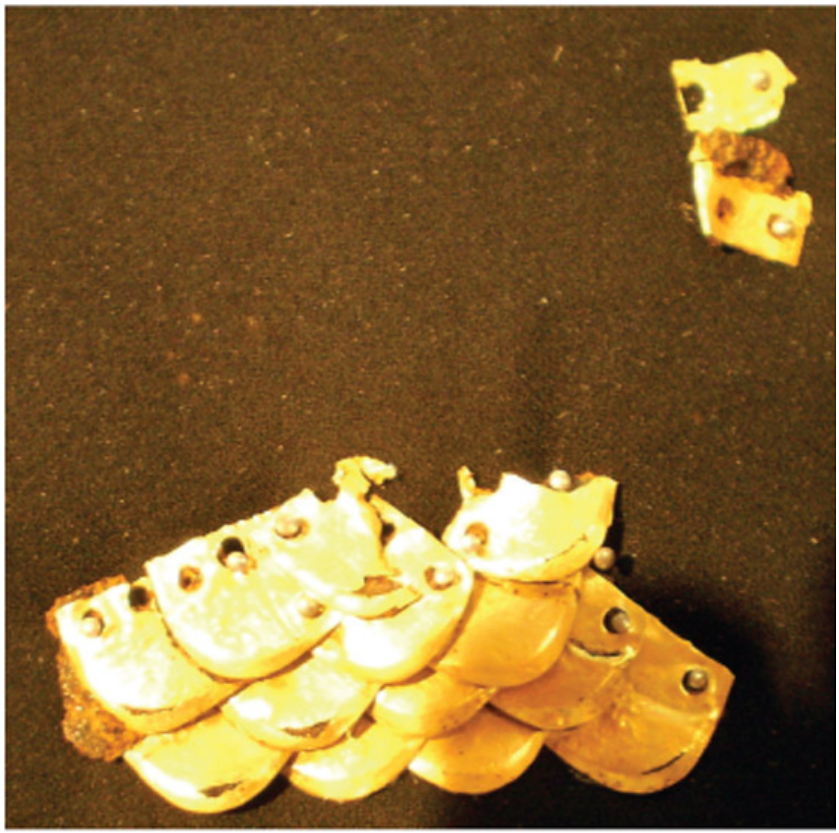
14. Metal armbands covering from fingers to elbow were found in 1879 in a burial mound near the village of Rozovets in the foothills of the Sredna Gora Mountains, northeast of Plovdiv. It has been suggested that the armbands were gold funerary bands or some kind of parade armour. These examples come from Razlog (Photo courtesy of Blagoevgrad Museum, Inv No. 1.1-942)



15. Beautifully decorated hilt from a 5th-century BC *kopis* found near Sozopol.



16. One of two sets of late 5th/early 4th century BC back and breast plates of combination bronze and iron armour from the Svetitsata mound. This is the earliest known iron plate armour in the Western world.



17. Gold scale armour pieces in the National Museum of History, Sofia. Scale and leather armour corselets of upto 20,000 pieces have been discovered in Thracian graves.



18. Armour and weapons from the Svetitsata tumulus, 5th century BC.



19. Bronze Chalcidian helmet and greaves from Golyama Kosmatka tumulus, late 4th/early 3rd c. BC. The helmet has an image of Athena attached to the forehead. The greaves have a similar face covering the

knees.



20. Athena's shield on a gold stag's-head rhyton from the Panagyurishte

treasure is decorated with a sunburst. The treasure is thought to have been made in Lampsacus by Thracian metalsmiths.



21. The long (approx 70cm) *machairai* wielded by the men on one of the gold amphora-rhytons from the late 4th/early 3rd-century BC Panagyurishte treasure.



22. Silver-gilt 4th-century BC Thracian (probably Triballi) horse ornament from Lukovit. Note the rider's short, curly hair and Greek-style cloak and tunic.



23. Horseman on 1st-century BC gilt-silver bowl from Yakimovo, northwestern Bulgaria (probably Triballi territory). He has a straight, long sword and what may be the riveted rim of a large circular shield is just visible below his chin. He wears trousers and is clean-shaven, with short hair. The stallion is saddled and harnessed, with a striated mane and plaited tail. *(National Museum of History, Sophia. Author's photo*)



Silver-gilt plaques, circa 400–350BC, from Letnitsa. 24. (**Above**) shows a top-knotted Thracian.

25. (**Below**) depicts a Vratsa-style greave being worn by the Thracian hero in scale armour. *(Both courtesy of Lovech Museum*)





26. ‘Horseman D’ from the Alexandrovo Tomb (400–375BC). He carries

his lance/*kamax* in the same manner as others depicted with the weapon. Although not clear here, the *kamax*, unlike a javelin, had a butt spike.



27. Grave stele from Athens, c. 400BC. An Athenian horseman holding two spears: a javelin and a lance or *kamax*. The detail shows the lance's conical spear butt. *(National Archaeological Museum, Athens; Author's photo*)

The Alexandrovo Tomb (c. 400–375BC) consists of two rooms, a rectangular entryway and a round chamber with a high dome. Both are covered with murals: men, animals, plants and geometric motifs.



28**. (Top left**) This warrior, from the dome, is armed with a curved, knobbed, wooden club about 1m long and a 2m-long knobbed spear.



29**. (Top right**) Two warriors on the antechamber wall. The shield is decorated with stars.



30**. (Bottom left**) A huntsman on foot armed with a long, knobbed spear, from the dome.

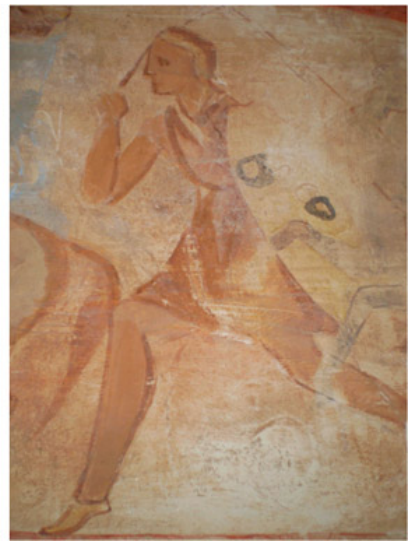


31**. (Bottom right**) Again from a hunting scene on the dome, a man with a curved knife attacks a stag. Note the animal skin draped over his arm as an improvised shield.



32. From the *tholos* (dome) of the Kazanluk Tomb - attendants wearing Thracian helmets and brown-striped tunics (similar to those on the Alexandrovo Tomb). The one on the left has a cavalry lance. The horse on the right has some sort of saddle with raised front and back. *(Author's photo*)





Details from the western frieze of the Kazanluk Tomb's *dromos* (entrance corridor). 33. **(Left)** Seuthes or his son. 34. **(Right)** A warrior runs after 'Seuthes', carrying a rhomphaia and oval shield. *(Author's photographs)*



35 and 36. Artists reconstruction of the Western (top) and Eastern friezes on the *dromos* of the Kazanluk tomb. *(© Johnny Shumate 2001)*



37. The central figures from the eastern frieze. They carry oval shields but wear no body armour. The man on the right wears a Thracian helmet, while

the enigmatic man on the left wears a kausia and carries a rhomphaia. *(Author's photo*)



38. Relief from Nessebur (ancient Messembria). A sacrifice in honour of Heros Sozipolis conducted by the *strategoi* (generals or magistrates) next to the sarcophagus of Herotim, Son of Herotim, end of 2nd/early 1st c. BC. This could show how late Hellenistic Greek generals (and also Thracian generals) dressed. Note the hats, probably kausia. (Museum of History, Nessebur. *(Author's photo*)



39. Three rhomphaia blades. from (left to right) Peltena Museum (Inv. No. 1.1-215), Plovdiv Museum (Inv. No. 450) and Blagoevgrad Museum (Inv. No. 75). *(Photos courtesy of Ilya Kulov and Blagoevgrad Museum*)



40. Fragments of rhomphaia blades from Razlog (left and middle) and Sredna in the Gotze Declev District. *(courtesy of Blagoevgrad Museum*)



41. Bent rhomphaia blade. After the Celtic invasion of Thrace, the Thracians seem to have adopted a few Celtic customs such as the ritual

destruction of weapons buried in tombs. Other rhomphaia blades have been found that were deliberately bent several times around in a spiral. (Inv. No. 1.1-1254 Courtesy of Blagoevgrad Museum)



42. The author with replica rhomphaia blade in Yambol Museum. Note how it is hung from the leather thong round the neck by a hook through hole near the handle. An original blade lies on the work bench. *(Author's photograph*)



43. A falx-wielding Dacian or Bastarnae warrior from the Adamclissi Monument. *(Author's photograph*)



44. The only falx blade discovered so far, with other Dacian weapons, in Cluj Napoca Museum. *(Author's photograph)*



45. Thracian horseman with huge ribbed shield on the Aemilius Paulus (Pydna) monument. Most of the other riders on the monument wear body armour but there is no indication of any here. Perhaps that is why the shield is so big. *(Author's photograph)*



46. Part of the Thracian fortress of Eumolpia, on a hill in central Plovdiv. Parts of the walls date back to the Bronze Age and are of 'Cyclopean' construction. Other parts progress through the Hellenistic and Roman periods and finally have Byzantine additions. *(Author's photograph*)

Chapter 6

Military Organization

Logistics and Military Organization

There was no fairly distributed 'draft' to supply troops for Thracian wars. Unlike the Greeks, the Thracians led a scattered life in villages, and the local military commanders took with them the men of entire families and even clans. The prospect of loot and a chance to prove themselves in battle could mean that these men would volunteer for the task. Thus after some successful campaigning Seuthes II's army tripled in size in a few weeks due to warriors turning up on the off chance of some loot (and contributions from conquered peoples).[1] Their training was via hunting expeditions and raids on other tribes, and included a sham combat in the form of a dance by two men to the sound of a flute.[2] Plato[3] declared that such dancing helped improve combat performance by 'avoiding all sorts of blows and missiles by nodding and stepping back and leaping up and bending down' and that this was possible in the space occupied by open-order troops.[4] Such dances in armour or with arms where characteristic of the Thracians.[5] The most famous example was that of Seuthes during a banquet with Xenophon. 'Seuthes himself stood up and shouted a war cry, leapt about with great agility, giving an imitation of a man getting out of the way of a weapon.'[6]

As part of the entertainment for a feast in Paphlagonia, a pair of Thracians from Xenophon's army

> stood up and performed a dance to the flute, wearing full armour. They leapt high into the air with great agility and brandished their swords. In the end, one of them, as everybody thought, struck the other one, who fell to the ground, acting all the time. The Paphlagonians cried out at

> this and the other man stripped him of his arms and went out, singing the ballad of Sitalkes. Then some more Thracians carried the man out, as though he was dead, though actually he had not been hurt in the slightest.[7]

Such a war dance is believed to be painted on an Athenian black-figured amphora of the sixth century BC, in the Walters Art Gallery in Baltimore. It portrays six armed men, all facing to the left – 'three warriors kneeling behind round shields and three archers standing erect' and brandishing bows and, perhaps, clubs. The warriors are said to be in Thracian costume but further examination shows them to be Skythian.[8]

The Odrysian kingdom had an annual income of 800 talents (half in coin, half in kind), which was only slightly less than that of the Athenian Empire.[9] The half that was in coin would have been sufficient to pay the annual wages of 7,500 mercenaries in Xenophon's time.[10]This is similar to the figure of 8,000 mercenaries that Polyaenus says was commanded by Iphicrates in Thrace, though he does not say on which side they fought. The Thracian army did sometimes include mercenaries, who could be Thracian or Greek, but this was not the preferred method of recruitment. Any money or other type of gift was paid to the local Thracian chieftain as a reward for his loyalty, and it was up to him to see if any of his troops got paid.

Probably typical of a payment scheme for the ordinary Thracian is Seuthes' proposal to Xenophon[11] that the Greeks be allowed to take what they want from the enemy for provisions, but anything saleable be given to the king so he can sell it and provide their pay. One way the Thracian king raised funds for his campaigns is also illustrated in the story that Xenophon tells of the drunken feast where a man goes around all the guests asking for a magnificent gift from each for Seuthes, in return for the king's favour.[12]

The independent attitude of the Thracians meant that they were hard to control. Fighting in groups with your relatives and neighbours at your side improves an army's cohesiveness and valour. However, the units of such an army have a peculiar behaviour and communicate with difficulty.[13] A trumpeter was used to communicate some commands, as Xenophon says that Seuthes arrived with his trumpeter, who helped to scare away the Thyni attackers. On that occasion the trumpeter was mounted, but the *salpinx* player could be an archer or peltast.[14] In another incident, the *salpinx* was used to recall peltasts who were pillaging Tiribazos' camp.[15] The army was not paid, but lived on booty, and the majority of troops would have supplied their own equipment. Consequently armies dissolved

quickly if unsuccessful. This was the prime cause for the brevity of Sitalkes' campaign against Macedonia. It may also have had an influence on the timing of the campaign, as there was a preference for marching after the harvest.

The encounter between Xenophon's Ten Thousand and a combined Bithynian–Persian army in 401 is a good example of the strengths and weaknesses of Thracian armies.[16] In this battle, the Thracian and Greek peltasts were placed on the flanks of the phalanx, but charged ahead of the main body. They were met by Persian cavalry and the Bithynians and driven back. However, when the hoplites came up, sang the *paean*, and raised a shout as they brought their spears down for the attack, the Bithynians and Persians ran away.

Thracian Formations

Little is known about Thracian formations and deployment. The cavalry formed into a wedge, which made a charge more effective, and the cavalry unit easier to manoeuvre.[17] The Thracians learnt this formation from the Skythians, and the Macedonians learnt it from the Thracians.[18] The king or chieftain would form the point of the wedge, followed by his closest retainers, with more men in each successive rank. It was probably sixteen ranks deep, and would have been most difficult to maintain except at the trot.[19] It would have been less difficult to wheel the formation at speed, as it would be easier for the succeeding ranks to see straight ahead and to the side and follow their leader. The increased visibility, number of ranks, and shape of the formation may have aided shooting, as it would be simpler to ride straight at a target, then turn and shower it with javelins. The triangular shape also means that the formation has no flank, and either side can quickly be turned to a front line.[20] It enabled the most efficient use of the best fighters and the best armoured men, as these could be put at the tip and outside edge of the wedge. Once they had broken into the enemy formation, the lesser armoured or motivated men would find the going easier.

Exactly why and how the wedge was more effective in the charge than a line of cavalry is not known. Its most realistic modern reconstruction can be seen in Eisenstein's film *Alexander Nevsky*, where German knights charge in wedge into spearmen, literally crashing into them, and breaking up their formation –apparently the horsemen were told that the infantry would get out of the way, while the infantry were told that the horsemen would stop before reaching them! That sort of tactic was appropriate for heavily armoured knights, but for partly armoured ancient cavalry, the

more recent film *Alexander* perhaps shows a more appropriate use for the formation. In that film, as he is said to have done in real life, Alexander sees a break in the enemy line, between two units, and charges straight for it. The wedge formation meant that only a small break was needed for the entire unit to quickly burst through, as the ranks in front made space for the succeeding ranks. If no break between units was visible, then it is likely that the enemy unit would have an uneven frontage, due to terrain or deployment difficulties. The leader of the wedge could lead his entire unit at the weakest point in the enemy line, whereas in a line-abreast attack only a small part of the unit would hit that point. If two lines were charging at one another, multi-pointed wedges had the effect of channelling enemy troops into the gaps between the wedges, where they could be attacked from two sides at once.

The Triballi drew up their forces in four ranks. In the first rank were placed the skirmishers and, behind them, the peltasts and heavier infantry. The cavalry formed the third rank but the rear rank was of women, who, if the men wavered, rallied them with cries and taunts.[21] There are references to a Thracian 'phalanx' but these are not very reliable and most probably refer to a disorganized mass of peltasts armed with spears of one sort or another. These would charge out in groups, throw their javelins, and then retire back to the main body. Presumably this was done in relays so a constant shower of missiles could be kept up.

The Navy

There is a lot of evidence to indicate that Thracian leaders sponsored ship-borne trade long before the arrival of the Greek colonists, and afterwards. Stone anchors from the second to first millennia have been found in the sea at many points along the Bulgarian Black Sea coast, e.g. Ropotamo, the headlands of Maslen Nos and Kaliakra, as well as at anchorage-points beside the harbours of Sozopol and Nesebur (Apollonia and Mesembria).[22]

Herodotus says that some of the Thracian coastal tribes (probably the Paeti, Ciconians and/or the Edonians), furnished ships to Xerxes' fleet when he marched through their country.[23] The Greeks dwelling in Thrace, and in the islands off the coast of Thrace, furnished the same fleet with a further 120 ships, the crews of which would amount to 24,000 men. Applying the credibility factor to Herodotus (i.e. reduce any large number he gives by an order of magnitude) gives a much more believable twelve ships. Thucydides says that the Greek cities paid tribute to the Odrysian monarchs, and Athens promised to provide ships as part of the alliance with Sitalkes.[24] The Odrysian monarchs could therefore call on a respectable

number of ships if necessary. Sitalkes did not see his promised Athenian fleet probably because it was so late in the year, and the Athenians did not want to risk losing their ships in bad weather (and/or the winds had begun to blow in the wrong direction).[25] Appian says before the arrival of the Greek colonists, the Thracians of the Chalkidian peninsula were not accustomed to the sea and avoided the coast for fear of pirates.[26] As this area is far to the west of the other tribes and cities mentioned above, it means that the coastal tribes had different relations with the sea depending on their location, and does not deny the possibility that some of the eastern Thracians could have provided ships to their king.

River transport was quite important to trade within Thrace –the major rivers were navigable for considerable distances from the sea. Papazoglu says there is clear evidence that the Triballi possessed a river flotilla, which Arrian says they used to cross the Danube frequently, in large numbers on plundering expeditions or for fishing.[27]

'Thrace, the Final Frontier' – The Military Geography of Thrace

Bronze Age Thracian culture may originally have stretched from the Ukraine to the Aegean and from Slovakia to the Black Sea. However, the Thracians referred to in classical texts occupied what are now Bulgaria, northeastern Greece, European Turkey, and Romania. This is an area of enormous climatic and physical variation. Thrace was hot in summer, snowy in winter, mountainous, and heavily forested, and the weather and terrain often played a critical part in determining the outcome and location of battles

In terms of climate, all Thrace is divided into three parts, roughly determined by its great mountain ranges. North of the Danube, there are temperate grasslands, leading to the steppe and the Carpathian Mountains. There is a continental climate with cold, wet winters (and temperatures as low as -30°C) and cooler summers (though temperatures of 38°C have been recorded in Bucharest). Between the Danube and the Rhodope mountains there are temperate deciduous forests. The southwest is much hotter in summer, and can sometimes reach 38°C. Even in the Rhodopes over 30°C has been recorded. South of the Stara Planina a transitional continental climate prevails, which is modified along the Black Sea coast to give milder winters. Summer in the Thracian Plain is like the southeast Australian summer, with the land looking just as parched. Temperatures are as high as those along the Aegean coast. The lowest winter temperatures hover around the freezing point. On the south side of the Rhodopes (as far

as the Bosporus) are Mediterranean woodlands. The climate is slightly wetter and gentler than that deeper south in the Aegean, but as in the rest of Greece there is scant rain during the summer months. Xerxes' army could easily have drunk some of the rivers dry – they are just a trickle in August. The average annual rainfall is between 500mm and 750mm.[28]

The Greeks were most acquainted with southern Thrace (wherein lie the highest mountains and coldest, most extreme temperatures). Their main impression of the region was that it was a land of ice and snow which caused frostbite amongst Greek soldiers who fought there. For instance, Aristophanes spoke of Thrace as a country covered with snow and ice-bound rivers;[29] Homer mentions 'snowy ranges of the Thracian horsemen.'[30] Euripides[31] refers to 'the harsh-wintered lands of Thrace' and other similar comments are made by Horace,[32] and Virgil.[33] The Greeks who fought in this area were not prepared for the winter cold, and suffered accordingly. By contrast, the Thracians' national costume provided good protection from the elements. Xenophon says,

> It was here that a number of Greeks lost their noses and ears through frostbite. It was then easy to see why the Thracians wear fox-skins around their heads and ears, and why they have tunics that cover their legs and not only the upper part of the body, and why, when they are on horseback, they wear long coats reaching down to their feet instead of our short coats…[34]

Not long afterwards, during a severe winter in Thrace, it was so cold that the Athenian general Chares had to order his inadequately clothed men to swap cloaks so they would carry out their orders without regard for how this wet or damaged their cloaks – this was successful as the men had no interest in sparing clothing that belonged to others.[35] Apparently spring was equally dramatic, as Euripides, spoke of Thrace as 'the land of flood and melting snow.'[36]

The differences in climate across Thrace are matched by differences in agriculture, with rye being the main crop north of the Danube and pasture (sheep, goats and cattle) being the main industry south of it, along with some agriculture. Large areas of the mountains were devoid of any agriculture but provided a huge timber resource.

Ancient Thrace was transected by several mountain ranges, running from west to east. The three main ranges are the Stara Planina (Haemus), which rises to 2,376m; the Sredna Gora, and the Rhodopes (including the highest mountain in the Balkans, Musala, 2,925m). By comparison,

Scotland's Ben Nevis is 1,343m, and Mt Olympus is 2,917m high. Even today, forests cover these mountains. In 181BC Philip V climbed Mount Haemus (in the Balkan range) because he believed the top of the mountain presented a simultaneous view of the Pontus, the Adriatic, the River Danube, and the Alps. He found that there was no way up for an army, but that the ascent was possible for a few lightly equipped troops by a very difficult route. At first the foothills presented only moderate difficulties; but as they reached the higher levels they were increasingly faced with wooded and often impassable ground. Eventually they came upon a track so shaded that it was scarcely possible to see the sky for the density of the trees and the interlacing branches. And then, when they got near to the crest, everything was so covered with mist that they were slowed down as much as if walking in the dark, and when they got to the top, they couldn't see anything. It took three days to climb to the top, and when they got to the bottom again, all of them were in a distressed condition, especially the king himself, because of the difficulty of the route.[37]

There are many accounts of Thracian battles where the outcome was affected by this mountainous terrain. Tacitus describes[38] a Roman attack on 'some Thracian tribes, whose wild life in the highlands of a mountainous country made them unusually fierce. Besides their natural ferocity... they pointed to fortresses amid rocks whither they had conveyed their parents and their wives, and threatened us with a difficult, dangerous and sanguinary war.' In Livy, when the Thracians are unable to hold back the Bastarnae:

> they abandoned the settlements on the plains and withdrew to a mountain range of immense height, called Donuca. When the Bastarnae tried to reach the Thracian position they were caught as they vainly attempted to get up to the crest of the range, by a storm… They were recklessly scattering in their headlong flight over the lofty crags and rushing to destruction, when the Thracians fell upon them in their panic…[39]

Again, in spring 335BC the Thracians occupied high ground above the lower slopes of Mount Haemus where they rise through a narrow defile, and attacked Alexander's army as it moved up the steepest part of the slope.[40]

Another example of how the terrain could affect a battle is provided by Frontinus. In 389BC

> Iphicrates, the Athenian, being encamped on one occasion on level ground, happened to learn that the Thracians were intending to come down from the hills, over which there was but a single line of descent, with the purpose of plundering his camp by night. He therefore secretly led forth his troops and posted them on both sides of the road over which the Thracians were to pass. Then when the enemy descended upon the camp, in which a large number of watch-fires, built by the hands of a few men, produced the impression that a mighty host was still there, Iphicrates was enabled to attack them on the flank and crush them.[41]

Polyaenus says that Iphicrates employed a similar tactic to foil another night attack, hiding his men in a ravine until the Thracians attacked his camp at night, then springing his trap.[42]

Today, more than half of Bulgaria is hilly or mountainous, and one third of Bulgaria is forested. In ancient times the woods could be quite thick, so thick that during his hard-fought campaigns (perhaps in 342–340BC) against the Thracian 'Arbelains' Philip II was forced to use bloodhounds to trace their movements. The region was rough, craggy and covered with woods, and the Thracians had concealed themselves in the thickets.[43]

Arrian says the Triballians prepared to fight Alexander from the shelter of a very thick wood by a river.[44] Alexander drew them out of the wood but after being defeated they then retreated to a wooded island in the Danube, which was successfully defended. Many years later the Roman victors of Magnesia were ambushed and defeated in a forested defile by about 10,000 Thracians. The Romans were travelling along a narrow and rugged track running for about 10mi through forests. The Thracians waited until the first part of the column passed, then fell on the baggage at the rear and made off with it.[45] Appian reports[46] that Brutus and Cassius were unable to get through the gorge of the Sapaeans because their enemies occupied it. A Thracian prince suggested a 'circuitous route (along the very side of the Sapaean mountain) of three days' march, which had been impassable to men up to this time on account of rocks, scarcity of water, and dense forests. If, however, they could carry their water and make a narrow but sufficient pathway, they would be so enveloped in shade that they would not be perceived even by birds.' Another Thracian prince acting as guide for the enemy army 'was astonished at so large an army traversing a pathway where no water could be obtained, and where he thought not even

a wild beast could penetrate by reason of the dense foliage.' [47]

The Athenian general Iphicrates (c.418–c.353BC), made great tactical use of the terrain and vegetation of Thrace. On one occasion the Thracians encamped nearby, so during the night he set fire to the forest between the two camps and abandoned both his pack animals and many cattle. When smoke darkened the night, he withdrew to a thickly shaded and bushy place and was able to evade the Thracians.[48] At another time,

> Iphicrates encamped in a plain surrounded by mountains, with a narrow exit across a bridge, which the Thracians intended to cross in order to attack at night. Lighting many fires in the camp, he ran up with his soldiers toward the foot of the mountain, set an ambush in a forest near the bridge, and kept quiet. The Thracians crossed the bridge and rushed towards the fires, thinking they would find the enemy there. Iphicrates took his soldiers from the forest, crossed the bridge, and retreated safely.[49]

Even the denizens of the woods could be dangerous – lions attacked the Persian army in Thrace, the Thracian aristocracy hunted wild boar there, and there were also Thracian white bears.[50] The Thracian woodlands were an important reason for the alliance that Athens usually sought with the Thracian monarchs. They were crucial to the survival of the Athenian fleet. They were a major reason why the Athenians took so much trouble to retain Amphipolis as an Athenian city.

Chapter 7

Fortifications

Towns, Sacred Sites, and Hill Forts

When all else failed, the Thracians would leave their villages in the plains and hole up in their hill forts. The Thyni did this when attacked by Seuthes, as did the Odrysians, Bessi, and Dentheletai when attacked by Philip V in Philippopolis (Plovdiv).[1] He took the town without a blow, as the inhabitants fled to safety in the three steep hills above (one of which is topped by the Thracian fortress of Eumolpia).[2] DIO CASSIUS[3] says the Getai hid in Keiris, a large cave that was so big that the Titans fled there after being defeated by the gods.[4] During the Roman campaign of 29BC the Moesi hid in a 'quite strong hill fort' but were conquered by M. Licinius Crassus.[5] In the same campaign, the defeated Bastarnae sought refuge in another Triballian hill fort in the Tsibritsa river valley, but were captured by the Romans.[6]

Frontinus says that in 402BC

> When Clearchus, the Spartan, had learned that the Thracians [probably near Byzantium or in the Thracian Chersonese] had conveyed to the mountains all things necessary for their subsistence and were buoyed up by the sole hope that he would withdraw in consequence of lack of supplies, at the time when he surmised their envoys would come, he ordered one of the prisoners to be put to death in full view and his body to be distributed in pieces among the tents, as though for the mess. The Thracians, believing that Clearchus would stick at nothing in order to hold out, since he brought himself to try such loathsome food, delivered themselves up.[7]

The hill forts were built on sheer and barely accessible, most often rocky, elevations. There are hilltop sites over 1,000m above sea level, but others can be much lower down, though still chosen for their strategic location on spurs overlooking the Central Plain. Forts in Greek Thrace are situated at between 600 and 1,000m above sea level; all have good sources of water close by and are prime strategic locations with an excellent view of the surrounding regions, in some cases even as far as the coast itself in clear weather. Alternatively, peninsulas jutting out into the sea could be used, or islands on the Danube, as when the Triballi hid on the island of Peuke in order to escape Alexander the Great in 335BC.[8]

Although Mycenaean ('Cyclopean') stonework can be seen at a few sites, most were not fortified with stone until the Hellenistic period, when they acquired towers, stairways, and double-faced walls (e.g. Seuthopolis and Helis). Initially of drystone construction, these were later replaced with stones joined by mortar. They frequently dominate and control a major route, and usually have circuit walls on the most vulnerable side, facing a valley or nearby village.[9] Some fortresses incorporated river defences, such as the Getic fortress of Genucla on the Istros River,[10] and Seuthopolis, on the banks of the Tonzos River. At Cherven, south of Rousse, there is a typical Bronze Age promontory site, an enormous circular hill with steep sides dropping to the almost encircling river offering both natural protection and access to water supplies. Only a narrow neck of land needed ramparts and ditches.[11]

Most Thracian forts were in continuous occupation for thousands of years. Some locations are rich in megalithic monuments, and many have been in use since early in the first millennium. Several were in continuous use until the end of the Byzantine era, and little (if anything) can now be seen of the original fortifications. Eumolpia, in Plovdiv, is an exception – you can see the Bronze Age Cyclopean walls and walk around the fortifications going past Hellenistic and Byzantine walls through the ages right up to a Second World War pill box.

There are the remains of fortifications on top of all three hills in Plovdiv. Before the beginning of the late Iron Age the three hills were used by the local Thracians as a refuge from danger and for cult practices (the latter being indicated by the presence of clay cult fire places – *eschara*). Eumolpia is on the top of the central hill, Nebet Tepe. The best-preserved remains are concentrated in the northwest corner of the site, and include a tower and the possible ruins of a late Bronze Age palace.[12] In this area there are also two gateways and internal connecting walls, indicating that

this part may have been the citadel. The walls are made of dressed stone with a rubble fill. In their current state, they are about 2–3m high and 2m wide. It is now believed that the pre-Roman era fortifications in Eumolpia were built in three stages. The first stage involved the construction of a diagonal wall linked to the solid tower, the eastern facade of the tower, the wall dividing the area into two terraces, and the inner face of the northern wall. These were all completed in *opus siliceum*, involving big polygonal blocks, with the wider and more irregular joins filled with stone fragments.[13]

The second phase involved changes to these buildings and the construction of new fortifications. It is characterized by the use of mortar and rectangular blocks. In the corner of the northern and the diagonal walls an internal tower was formed, erected on the pavement of the older entrance.[14] The area enclosed during the first and second phases remained rather small, about 0.2ha.

The third phase is related to the erection of a new fortress line on the southwestern slope of the hill, thus excluding the diagonal wall and its tower from the fortifications. This line joins the northern fortress wall at a right angle, incorporating the latter into the new fortification system. In the corner of these walls an internal tower was formed which overlaps the structure of the tower from phase two. To the southeast the new southeastern line extends to a big rectangular tower with a small postern gate. Both the inner and the outer faces of the walls are built the same way, from regular blocks of syenite, white limestone, and sandstone. The core was filled with river stone mixed with earth. The third phase fortifications increased the area enclosed to about 1.6ha. This area would have included the residence of the last Thracian kings.[15]

Most of the evidence points to the fortifications being dated to the early and late Iron Age. There are sufficient finds from the early Iron Age and late Bronze Age to support the hypothesis that there were fortifications and other buildings on the site at that time. The three phases present on Nebet Tepe belong to the late Iron Age and the early and late Hellenistic periods. They correspond to the period of struggles between the Thracians and Macedonians. This was probably the place where Philip V's military garrison was accommodated in 178BC after they took the city by assault.[16] The third-phase constructions are assigned to the period between the second and first centuries AD, i.e. the last years before the establishment of Roman rule. These were especially turbulent times, with the Thracian king being beset there by rebellious tribesmen in AD 21 because of his dealings with the Romans.[17]

Although the Thracians only built three fortified towns or cities (Seuthopolis, Kabyle and Helis), they had numerous forts – more than fifty hill forts in Greek and Bulgarian Thrace alone.[18] Demosthenes mentions three in 341BC (Crongilus, Kabyle and Mastira) 'and the other places' that Philip II was enduring great hardship in order to occupy.[19] Although they had buildings inside their walls, they were most often not lived in, but used as places of refuge. The people lived in a village at the bottom of the hill on which the fort was sited. A Roman attack on one of the Stara Planina hill forts during AD26 is described in Tacitus:

> Besides their natural ferocity, … [the Thracians] pointed to fortresses amid rocks where they had conveyed their parents and their wives …[20]

For the Romans to invest it, this fortress required lines of circumvallation 4mi long. A number of these drystone-walled forts have been uncovered.

> One, at Chertigrad, on a peak in the upper Vit area on the north slopes, had a wall about 2.2m wide and 3–3.5m high, faced on both sides with well laid stones and a fill of small ones, to protect its only accessible side. It was dated from the 5th–4th centuries BC. It had been once rebuilt, using the same methods. Inside the wall a platform 2.4 by 1.4m defended a narrow entrance, contrived between one end of the wall and the cliff, its access a ramp aligned along the wall's outer face. Remains of buildings showed that the fort was used for permanent habitation; it possessed a niche specially cut to receive the sun's first rays.[21]

Other locations for Thracian fortified towns that have been proposed include Pernik, Pistiros (Vetren), Simeonovgrad (Asara), and Mezek (Kaleto).[22] Pistiros is the best-documented site but is really a Greek *emporion* (trading post) where some Thracians lived, not a Thracian town. Nicola Thiodossiev lists six hill forts in Triballi territory where kings and chieftains lived, together with their family, servants, and troops. These were Bistrilitsa, Kunino, Leskovets, Mezdra, Pomezhdin, and Staro Selo.[23]

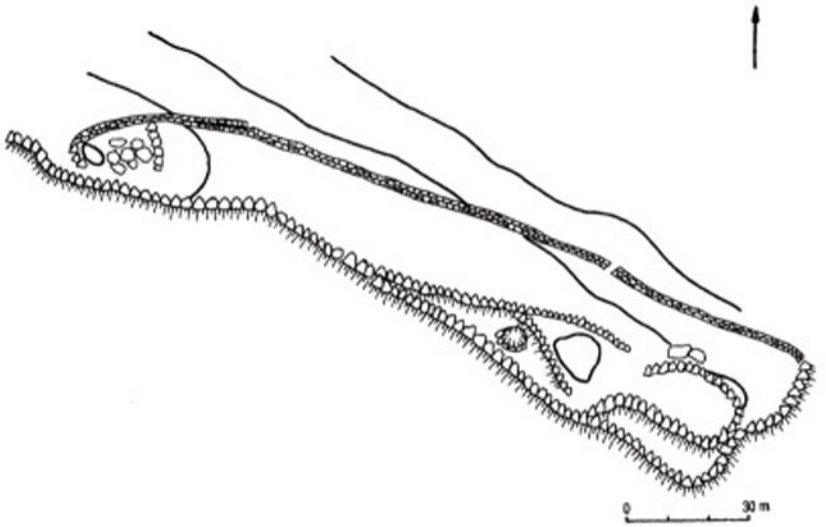


Fig. 30. Triballi hill fort at Pomezhdin (after Theodossiev, 2000).

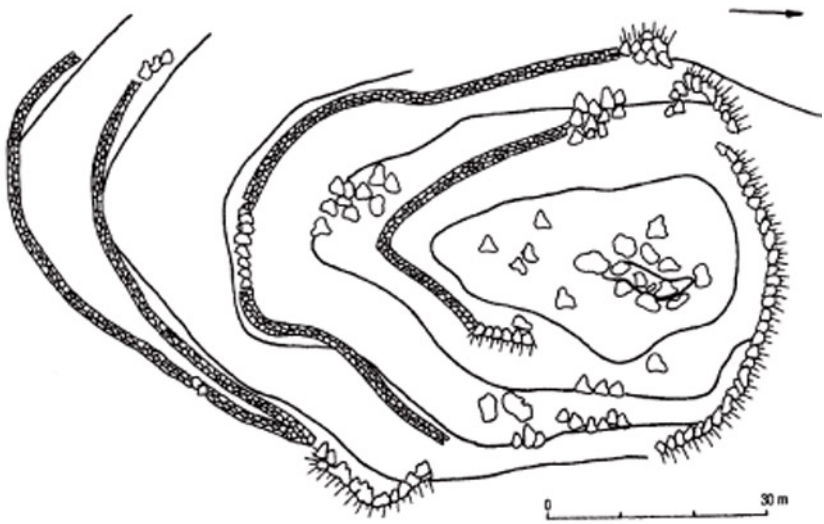


Fig. 31. Triballi hill fort at Kopilovtsi (after Theodossiev, 2000).

The Krakra fortress at Pernik was located on a small peak above a plain, partly enclosed by a deep gorge in which flowed the upper river Strymon. In the fifth century, Greek craftsmen built a wall 3m thick with a

double facing of dressed drystone sandstone blocks and a compact fill of clay and broken stone, reinforced in places by a grill of wooden beams. Steps climbed the inner face, and a drain disposed of surplus rainwater. This fort contained buildings (some of Greek construction) and was probably inhabited by the Agrianians.[24]

In northwestern Thrace, on Triballi land, twenty-four hill forts and fortified places have been identified that operated between the fifth and first centuries BC. Twenty-two of these are in the eastern part of this region (guarding against Odrysian incursions such as that which led to Sitalkes' death). They are concentrated on the Berkovitsa–Chiprovtsi Balkan mountain and in the middle of the Iskar river valley. They are located near roads and/or mines and some are the centre for ore extraction, smelting, and other metallurgical activities. Usually the preserved area measures between 0.3–0.4ha and 1–1.2ha, except for Chomakovtski, where the fortified site is about 3ha. The walls are 1–3m thick and are built with rough and irregular-shaped and -sized stones, sometimes with mud binder. There is a shelter-dyke in front of the east wall of the circular hill fort at Ohoden. No walls were built where the slopes were steep and inaccessible but in some cases two, three, or even four tiers of walls were built. The late Iron Age hill fort near Kopilovtsi had an oval design, measuring 102 by 55m, with four walls on the east and south-west, and a single wall on the north. The walls were covered with dry freestone masonry.[25]

Towers were also built on some sites and the entry to the Pomezhdin (Ravnensko Gradishte) hill fort has overlapping walls. This fort is situated on a high mountain peak, with sheer rocks to the east, south, and west. On the north side there are the remains of a wall, 1.8–3.1m thick and 200m long, built with drystone masonry. The entrance and the ruins of a tower are in the northwestern corner.[26]

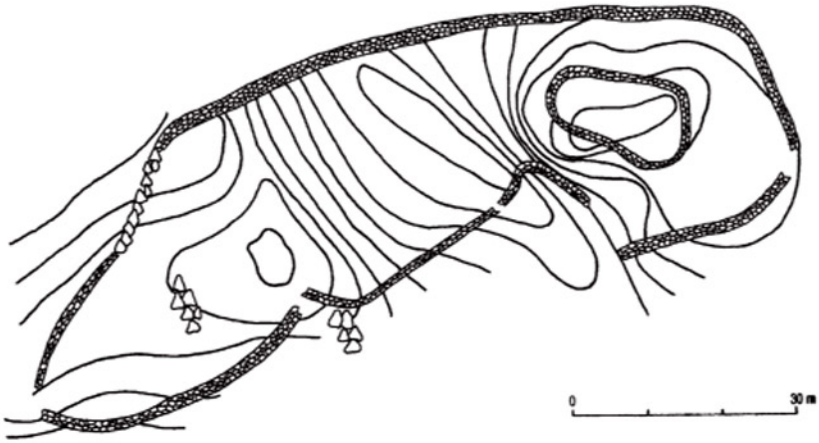


Fig. 32. Triballi hill fort at Elovisa (after Theodossiev, 2000).

In the Elovisa hill fort the highest point is enclosed by a second (internal) wall, possibly surrounding a 210m[2] citadel and the location of the local chieftain's residence *(tyrsis*). The fort is oval in shape, 105 by 33m, and the walls constructed of drystone masonry.[27] At Chomakovtski the fort relies on natural defences of sheer rocks, with the only accessible southeastern part being blocked by an 8–10m wide trench and a 2m-high rampart with a palisade on top of it. It may have been permanently inhabited by ordinary people.[28]

As mentioned above, most of the forts have been in use since prehistoric times, but there are also many tells in Bulgaria that have been fortified. An early Chalcolithic (fifth millennium BC) settlement at Polyanitsa in northeast Bulgaria had triple palisades, with entrance gates in the centre of the east, south, and west walls.

> The outer and inner palisades used posts 25–30cm thick; the intermediate one or in places, two were less substantial, as were the northern defences bordering a swamp. That the last of the eight Chalcolithic building levels was destroyed by fire was largely due to the constant attention paid to the defences. The second level saw the inner palisade replaced by a clay wall enclosing lines of tree trunks up to 50cm thick. Horizontal beams with an earth fill joined inner and outer facings of wattle, thickly plastered with clay. The whole wall may have been 3–4m high; burning of the outer palisades only served to harden the inner wall's clay surface. Later the outer wall was buttressed and

> strengthened, with more ramparts at vulnerable points, especially gateways, which were also defended by clay faced wooden gate towers and by ditches 2m deep crossed by removable bridges. Towards the end, crowding ruined the symmetry of the settlement, but its defences received increased priority.[29]

The late Bronze Age Ostur Kamuk fortress, near Kurdjali is protected on its accessible sides by a massive seven-angled drystone wall, 262m long and 2.2m wide. It has roughly cut but carefully laid blocks sometimes 1m long. It is situated to defend the Thracian plain to the south, possibly from Mycenaean incursions. There are Iron Age fortresses nearby which can be distinguished by the smaller stones that make up their walls.

A fortification system was found at the early Bronze Age (3500–2000BC) Yunatsite tell, consisting of a defensive wall with stone footings, ditch, bank, and palisade. The tell is in the Pazardhik district. Yunatsite Tell is 12m high and 120 × 115m wide at the base. It was occupied from the Chalcolithic to the early Iron Ages. During the early Bronze Age, the tell was a citadel with a large unfortified settlement. It controlled the valley of the Maritsa river and the roads crossing the Rhodope mountains from the Aegean coast and the Central Balkans.[30]

A later Bronze Age (third millennium BC) settlement at Barca in east Slovakia had an earth rampart enclosed by posts interlaced with branches and strengthened by struts laid horizontally from front to back. Another palisade surmounted the wall.



Fig. 33. Polyanitsa fortifications.

> The same technique was used at Nitriansky Hradok in west Slovakia. At Otomani, north-east of Oradea, the first settlement was on the triangular head of a ridge above marshland and within a river bend. A ditch 20m wide and up to 4.3m deep, backed by an earth rampart, protected this citadel settlement from attack along the ridge and continued around it, narrowing to about 16m wide on the other two sides and apex of the triangle. On a lower terrace, a second ditch 14m wide and 3.75m deep reinforced the first on the more gradual north slope.[31]

Otomani mountain settlements like Spissky-Stvrtok, were usually fortified by powerful drystone walls, 6–7.5m wide, with inner and outer facing of roughly cut blocks. The area enclosed by the Otomani fort grew to 6–7 ha, one of the largest at the beginning of the later Bronze Age.

Marazov says that the Thracian word for 'village' meant 'fence.'[32] Xenophon says that each house in a Thyni village was surrounded by a high, strong wooden palisade:

> And the master of each separate house acted as guide to that house; for

> in the darkness it would have been difficult to find the houses in these villages in any other way; for each house was surrounded by a paling, made of great stakes, to keep in the cattle.[33]

The small but better-documented Dacian villages were also surrounded with palisades and deep ditches. Their wattle and daub thatched huts had a rectangular ground-plan and a saddle-roof. The hearth was usually placed in a corner or near a wall.[34]

A Thracian village consisted of scattered wooden huts inside small, fenced enclosures for cattle. Most settlements were open. Except on rocky land, dwellings were usually one-roomed, rectangular semi-dugouts, about 3.5m long and 3m wide, but sometimes larger. The dugout base, 40–90cm deep, was often stone-lined. The wattle and daub superstructure had a gabled or slanting roof of straw or branches mixed with mud or dung. Vinitsa, southwest of Shoumen, probably a typical village, comprised from twenty to twenty-five semi-dugouts, each containing a hearth usually in or near a corner, and an oven annexed to an outside wall and sometimes under a lean-to, but with an opening into the hut. Surrounding post holes remain from small fenced enclosures for stock. Two huts were smithies with furnaces made of mud and broken rock; there was much wood ash and iron slag. Two hollows carved in a nearby rock were for tempering small objects like arrows or spearheads.[35]

Some villages also had basic fortifications. At Cucuteni in Moldavia, the remains of thirty rectangular huts have been found on a 1.48ha Neolithic site, on a 346m-high rocky spur with three sheer sides. The fourth side, the neck of the promontory, was guarded by two moats. The inner, earlier one, is from 2.4m to 3.9m wide and 2m deep. The outer, later trench, is 4.6–8.5m wide and 3m deep. Stones from the trench were used to reinforce its inner face.[36] It was apparently a peaceful place, as it was unwalled and only a few weapons have been found there (flint arrowheads and spear points). After surviving for at least a millennium, the village was destroyed by fire between 2000 and 1800BC.



Fig. 34. Fortified village with double ditch, Habasesti, Romania.

At Habasesti in Romania another village of forty-four houses (dated 2700–1800BC) was also defended by a double ditch on one site, and suffered the same fate. The other three sides of the six acre site were defended by steep slopes but again were unwalled. The ditches were each 122m long, from 3.7–7.3m wide, and 1.5–3.7m deep. The village's size implies a workforce of about 200 who would have removed 2,400m^3 of earth from one ditch, and 970m^3 from the other – with Stone Age tools. Unlike other fortifications, the earth was not simply thrown onto the side, so there was no palisaded vallum. Over 800 stone arrowheads were found on the site, which was reoccupied around 500BC.[37]

There are many other similar sites in Romania dating to the early Iron Age (1200–500BC) that are fortified in the same way. One such was at Fergile in central Romania, 100mi from the Bulgarian border. There many ritually bent iron 'scimitars', curved knives, and axes were found in 200 cremation graves. The inhabitants were horsemen, as harness gear has also been found there.[38] Another seventh-sixth-century site at Poiana, in Lower Moldavia, on the edge of the steppe, was on a 198m-high steep-sided plateau. It later became Piroboridava, an important Geto-Dacian tribal centre.[39]

Many fortified settlements increased in size during the later Bronze Age (thirteenth–twelfth centuries BC) in Transylvania. This is thought to have been a period of intense inter-tribal warfare. Some sites were immense and exceptionally strongly fortified. The largest initially (78ha) was near the lower Mures-Sintana. It had two walls, built on top of one another. The first wall was 10m wide and 4m high with a ditch 3.5m broad and 3m deep. It was replaced by a colossal construction some 25m thick and 7m high, with

a trench 13m wide and 4m deep. Corneştii-Jădani, south of the Mureş, was initially 67.5ha but was encircled by two additional outer walls, the inner enclosing over 200ha and the outer 586ha. The upper Someş site of CiceuCorabia initially enclosed 30ha. These huge fortifications protected an urban industrial population that was associated with an intensive metallurgical industry that has left us tonnes of bronze weapons and armour.[40]

Beginning around the last quarter of the fourth century BC the Getic capital of Helis, at Sboryanovo (close to the Sveshtari tomb) in northeastern Bulgaria, apparently acquired very sophisticated fortifications.[41] These included catapult platforms and covered towers.[42] An inner wall was built in a hurry, suggesting that the town came under attack. It is a 10ha fortified peninsula, built on a plateau surrounded on three sides by the Krapinets River. The only access is a narrow rocky ridge about 40m wide. The main curtain wall has a width of about 3.6m and a length of approximately 1.4km. It is faced with large rough-hewn blocks of local limestone and filled with different-sized stones fastened with well-mixed clay. The latter has been fired to brick to make it harder on the outside of the walls. It is thought that the walls were at least 7–7.2m high, excluding the parapet and roof, the latter making them 9m high or more. It is thought that the walls were covered with an angled roof, like a medieval wall, because of the clay bond, which would otherwise have been washed away.[43] The roof would also protect the garrison from severe winters prevalent in the area. The fortifications were constructed in three stages. First, the curtain wall (about 315–310BC); then the projecting walls (towards the end of the fourth or the beginning of the third century BC); then the strengthening of the walls and the construction of the inner wall (280–270BC).[44]



Fig. 35. The walls of Helis, the Getic capital.

The wall has very few towers, probably owing to its positioning on a steep slope, and its width, which would allow the free passage of soldiers of the garrison to threatened points. There are four gateways into the fortification – the south, southwest, west, and north gates. Excavations have so far revealed a tower at the south gate, and another 80m to the east, with a postern. The north and south gates had several stages in the evolution of their construction, ending in the case of the north gate with a massive projecting, roofed tower to the west, and a projecting wall to the east.

Projecting from the east curtain wall are two other walls that go down into the valley, partitioning the left bank of the river and enclosing the residential and industrial area in that part of the valley. A third projecting wall runs down to the river starting about 40m northwest of the north gate, protecting the northern part of the western suburbs.

A hastily constructed inner fortification wall was built of rough-hewn stones, clay and wood 10–30m from the outer wall. This wall is dated to 280–270BC and is presumed to have been constructed to protect against attack from the south, where a hill suitable for siege devices is situated. Some 60m of the south wall, west of the south gate, was also widened at this time. This last is related to perhaps the most interesting and significant discovery at this site. Catapult bolts and stone ball ammunition have been found in an arsenal on the ground floor of this wall. The most likely explanation for the widening of this wall up to 9m is that it was to provide artillery platforms (in one or two stories) to counter the besieger's siege weaponson the hill.[45]



Fig. 36. Gateway, Helis.

It is thought that the city had a population of 4–6,000 and a garrison of at least 500 soldiers and cavalry. It was destroyed by an earthquake about 250BC and not rebuilt. A variety of evidence indicates that this city was Dromichaetes' capital.

Xenophon says he visited Seuthes II in his *tyrsis*, or tower/fortified palace. One such site is at Perperikon, 320km southeast of Sofia, in the Rhodope mountains near the southern Bulgarian town of Kurdjali. Perperikon was probably the capital of the Satrai (a priestly clan of the Bessi, who had their capital at the fortified settlement of Besapara, southeast of Pazardhik), or at least a major religious centre for the region. Perperikon was occupied from the fourth millennium BC, and a cult and religious site from at least the second millennium BC, but during the fourth and fifth centuries BC it became one of the Thracian capitals. It consists of a monumental palace with a length of more than 80m, containing fifteen

rooms on three or four floors. The multi-storied building is shaped like the Latin letter 'L' and approached by a 100m-long passage. There are many rooms hewn out of the surrounding stone, including a ceremonial throne room with a throne fashioned out of the same stone.[46] Its acropolis has walls 2.8m thick, built without any binding material. The big stone blocks covering the inner and outer sides of the wall are cut smooth to make a perfect fit. The space inside the walls is packed tight with broken stones. A rock-cut passage 3–4m wide and 7–8m high leads steeply up to the entrance of an area tentatively identified as a rock-cut 1.7ha 'palace'. To get into the palace you had to go through two double-doored gates whose sills are excellently preserved. Between the two gates is a narrow passage where an attacker would become trapped and an easy target for the defender's arrows.[47]

Another *tyrsis* was Tirizis (now called Kaliakra), north of Varna on the Black Sea coast.[48] It was sited on a peninsula with high cliffs leading down to the sea on three sides. An outer wall and an inner wall (with gatehouses and towers) were built across the neck of land at is narrowest points. Its first inhabitants, the Thrisians, established the fortified settlement in the second half of the fourth century BC. Its high cliffs must have made access difficult from the sea but it was linked to a port, and was a popular anchorage. One hundred stone anchors have been found in the sea next to the castle, more than anywhere else in Bulgaria.[49]

It came under attack by successive Thracian kings. Later, Lysimachus was supposed to have hidden his innumerable treasures in the caves in the cliffs. Under Rhoemetalces I its fortifications were restored by the Thracian *strategos* Pharsalos Bitus, but it fell under Roman dominion during the Mithridatic wars. Like many other Thracian fortifications it then had a long and illustrious history, the high point being the thirteenth to fourteenth centuries AD.[50] The Thracian walls can now be seen only as the lowest level on some of the medieval walls.



Fig. 37. Seuthopolis fortifications.

There was a fort *(tyrsis*) on the north shore of Lake Mandra near Burgas. Other Thracian coastal forts have been excavated near the village of Rouen at the head of the Bay of Burgas. The 6th–5th century hill top fort at Malkoto Kale is one of a chain of Thracian strongholds in the copper-bearing hills (Medni Road) near Apollonia Pontica.[51] The Thracian word for fort, *'bria'*, is reflected in names like Mesembria (modern Nesebur), which is believed to have originally been the Thracian fort and port of Melsambria. Melsambria existed two or three centuries before being eclipsed by the Greek town.[52] According to Strabo, Mesembria was earlier called Menebria ('the city of Mena') because its founder was called Mena, while *bria* means 'city' in Thracian; thus the city of Selya, on the northern shore of the Propontis (Sea of Marmara), was called Selymbria, while Ainos was once called Poltymbria.[53]

The best-known Thracian fortifications are at Seuthopolis. Seuthopolis was a fortified Thracian city of approximately 5ha, some 8km from the Kazanluk tomb. It is now submerged under the Koprinka dam near Kazanluk. It was founded at the end of the fourth century BC by Seuthes III (323–311BC) on the site of a *tyrsis* that dated at least to the time of Philip II (359–336BC). It was a centre of production and commerce and the king's power. The city was laid out to a regular Hippodamian plan, like other Hellenistic cities, with two large arteries that lead from the gates to the centre. The houses, many of which were laid out to a Greek plan, were provided with wells and drainage systems which fed a channel in the centre of the street.

The city rose on a terrace surrounded on three sides by the Tundza River and one of its tributaries, forming a natural moat except on the

northwest side. It had a pentagonal circuit wall 2m thick and 890m long, with a square tower at each corner. The main gate was on the north side, between two equidistant towers, while there were two gates in the south wall, between bastions. There were no towers on the southern wall, but the wall was reinforced and broadened by regular projections, 2m wide. The wall was constructed of clay bricks and wood on low stone foundations. The foundations were built of two rows of large rough-hewn stones, with their smoother side turned outwards. The space between the wall facings was filled with quarried stones of varying sizes, cemented with mud. Mud-brick walls rose above the foundations, in a framework of wooden beams, nailed together with long iron nails. Wooden stairs led up to the breastworks of the walls and to some of the towers.

In the north-east corner was a walled and towered enclosure containing the colourful two-storey palace of the prince and the sanctuary of the Great Gods of Samothrace. This area was not the most easily defensible in the city and it is thought that the walls on the inside of the city were relics of the original *tyrsis*. In the new city they served to protect the monarch from the city populace. A very large tower in the southern corner provided additional protection for its only entrance, a gateway on the internal eastern wall. There was also a smaller tower in the middle of the internal south-west wall.[54]

In its short life, the city was burnt three times, the first time probably when Philip took over, the last time after a siege. At the end of Seuthes' reign the city was taken by storm, pillaged, and totally destroyed. This was probably the work of the Celts. There was some attempt to restore the ruined city during the third century, but it was mostly uninhabited after the reign of Demetrius II (239–229BC).

Kabyle was another of Seuthes III's economic and trade centres.[55] It started as a Thracian sanctuary and fortress but had a long history under the Romans, and only the Roman walls (sitting on top of the remains of Hellenistic walls) can be seen now. More Thracian material may yet be found at Kabyle: because of the extensive remains from later periods, excavations have usually had to stop before reaching the Thracian layers.

Kabyle is on the right bank of the river Tonzos (modern Tundza) near the city of Yambol. The town may have been built on a bend of the river like other Thracian settlements, but the river's path in ancient times has still to be established. It began as a Bronze Age settlement of the second millennium BC. The Thracian city was conquered by the Macedonians in 342/1.[56] It was conquered by Rome in 72BC[57] and it became a city, rest stop

on the major roads, and garrison town in the Roman province of Thracia.

The most sophisticated fortifications were created by the Dacians, who built an extensive system of at least forty interlinked forts and towns in what are now the mountains of Romania. They equipped their towns and forts with siege artillery, and obtained Roman help to rebuild and reinforce some of their construction. They were built from stone, fired brick, and wood.

They even had their own original wall construction - the famous *murus Dacicus*. This utilized regular, thick, horizontal cross-beams of wood in the stone walls, giving the walls some flexibility that (amongst other features) helped preserve them during earthquakes. The space between the inner and outer drystone ashlar faces was filled with earth and stones (without mortar) and joined by the cross-beams, which in turn were fastened to the stones by wedges made of swallowtails.[58] The beams laid in 'swallowtail' grooves helped to withstand lateral pressure until the fill had solidified. These were probably adapted from a Hellenistic building technique found in walls in Histria, conquered by Burebista in 55BC. There weren't any foundations; the slope was levelled to build the first course. The wall averaged 3m wide and sometimes rose 3–4m high or, after two to five ashlar courses, was surmounted by mud bricks, protected from rain damage by tilted logs.

The same technique was used for building the isolated tower-houses found in most forts, the lower part used for storage and the upper storey, reached by wooden stairs, as a leader's dwelling. The lower storey in one at Costesti was entered through an imposing double doorway and had huge stone blocks in the lower story. The lower, stone part of the towers was about 2m high, and the brick upper story a further 3m, the total height being 5–6m. The mud bricks have mostly been washed away, so the upper storey is not visible.[59]

Some of the features of a Dacian fortress were:

- Terraces constructed by moving large masses of earth layer by layer and stabilized by the planting of trees;
- Altering the terrain in order to make approach to the fortress difficult for invaders;
- Dividing the fortification interior into various sections, so defenders could retreat progressively further into the fortress if necessary;

- A wall positioned close to the entrance of the fortification so that invading forces could be separated from each other;

- Multiple circuits of walls, or double sections of walls with one overlooking the other.

Some fortifications were purpose-built, while others were adaptations of existing sites. This, combined with lack of time or availability of foreign skills and use of traditional methods, led to an extraordinary variability in design and construction methods.[60]

In addition to the towns and forts, watchtowers supervised the ancient road, 20km long, from Costes,ti-Blidaru to Sarmizegetusa, and at other locations. There was also an imposing defensive wall from Cioclovina-Ponorici. This was built of wood and unshaped stones; it is more than 2.5km long and it has immense bulwarks of 40–80m in diameter, as well as perpendicular walls jutting out from it, designed to break up the enemy attacks.

Sarmizegetusa, Blidaru, Piatra Rosie, Costesti, Câpâlna and Banita formed the central part of Decebalus' defensive system. The royal citadels of Sarmizegetusa and Costesti are of particular note. Sarmizegetusa is at 3,937 feet (1,200m), on top of a steep hill. It consists of two main areas, the fortress and the sanctuary, connected by a 5m-wide paved road. The walled area, an irregular rectangle (it follows the contours) with two gates, is nearly 7.5 acres (3ha) in extent, with six levels of terraces (one 14m high). It is about twice the size of the sacred precinct.[61] There is one (unexcavated) area raised above the others that is probably the site of the king's residence. Buildings inside consisted of log cabins on stone footings, with handsome iron-studded doors, the walls faced with polished and painted clay. Many iron artefacts were found on the site, including spurs, crampons (for climbing the mountain in winter), daggers, curved Dacian swords, spear points, and shield bosses. The Romans partly destroyed the walls at the end of the first Dacian war in AD 102, but the Dacians rebuilt them.[62] The wall that remains is made of stone, 3.2m wide and about 2m high. At various points along the wall can be seen the remains of towers and gatehouses.[63]

Costes,ti, a former tribal settlement, was planned as a stronghold commanding the river valley. An earthwork, 6.1–7.9m thick at the base, and still standing 1.8–2.4m high, follows the contours of the hill, enclosing an area of about 12ha. A palisade of stout earth logs originally topped the earthwork. Within it ran a towered stone wall, a *murus Dacicus*. Inside, on the accessible south side a wall incorporated three bastions or watchtowers, and an isolated tower overlooked the west. One, stone-built, overlooks the river hundreds of feet below. A second, near the middle of the area, stood

on wooden stilts set in stone footings. The third is the most interesting. It is a two-storey tower-house, approached by a monumental stone stair, with a storeroom below and living quarters above. Despite its modest size, this is thought to have been Burebista's royal residence. There are also the columned sacred precincts like those at Sarmizegetusa, only smaller. Outside the wall there was a series of cisterns to catch rain water. Costes,ti had a 4m-wide late-second-century-BC palisade or rampart, which was destroyed by the Romans at the end of the first Dacian War (102), rebuilt by Decebalus, with a new but traditional rampart, 6–8m wide at the base and today 2–2.5m high. Wooden beams reinforced its interwoven wattle-and-daub framework and the ends overlapped to defend the gate. It was destroyed again in the second Dacian war (106), and not rebuilt.[64] Beyond the rampart three similar towers guarded the valley and the paved road to Sarmizegetusa, 10km away.[65]

Blidaru was a twin fort built to reinforce Costeşti (it is on a 250m-high knoll at 703m above sea level, visible to the south of Costeşti), probably in the reign of Decebalus. The two forts were built one after the other, with walls of the *murus Dacicus* type. The older citadel is the higher. It is trapezoidal in shape, with towers at the four corners, one isolated tower inside and another outside. The entrance is through the southwest tower. Within is a tower house of stone and wood, not as elegant as the one at Costeşti – more suitable for a castellan than a king. With neighbouring entrances on the south side, the forts were in fact semi-detached. The second citadel, put up a little later, is built onto the west wall of the first, and incorporated the outer tower. The northwest and southwest walls were exceptionally strong. This fort's unique feature is a series of eight casemates of alternating courses of limestone ashlar and uncut mica-schist block, square rooms abutting on the inner face of the wall. They were used as storerooms (huge storage jars were found in them) and armouries. Their flat roofs were probably used as fighting platforms for some of the artillery seized in Trajan's First Dacian War.[66] Outside the wall of the second citadel to the north-northwest is a large cistern, 6.1m by 7.9m, stone-built, lined with cement *(opus signinum*) and covered with a vault of limestone blocks. As this is a Roman construction technique, this may have been built by the Roman engineers Decebalus got as part of his peace treaty.[67] Not far from the defence works there were two sanctuaries.

The settlement of Seica Mica, Sibiu County is situated on a hill, on the Tirnava Mare River. The easiest way into the settlement was defended by four lines of earthworks. The first was 4m deep and 20m wide supplemented by a wall situated approximately 60m nearer the settlement.

Between the wall and the settlement ranges of trenches, 3m high and 19m wide were situated at 150m intervals. The less easily accessible flanks were protected by two lines of defence.

The fortress of Tilişca, also near Sibiu, was surrounded by two outer walls, one of which consisted of a rampart made of earth and a moat, the other of a stone wall with a gate and two watch towers. The foundations of these towers were made of blocks of freestone, each divided into two and the gap between the halves filled in with rubble. The walls were made of fired brick.[68] The fortress had a cistern and like most Dacian fortresses was burnt by the Romans.[69]

Unfortunately nearly all the histories of the Dacian wars have been lost, so there are no detailed accounts of the sieges of these places. We have only the dramatic but not wholly reliable illustrations from Trajan's Column. These include houses on stilts within the fortifications, such as was found at Costesti. In front of the fortifications are pitfalls, which Decebalus could have learnt about from the Romans. Outside the walls, the Romans set fire to wooden, shingle-roofed tower houses, and elsewhere they set fire to a palisaded Dacian camp. In another frame, Dacian women inside a fortress torture a Roman prisoner, while in yet another Romans storm up the steps of a Dacian citadel, like those found at Costeşti. One of the final scenes shows desperate Dacian nobles inside a fort sharing a cup of poison or water. One of the earlier scenes shows that the Dacians had some siege engines of their own – they cross the Danube and attack a Roman fortress with a battering ram.[70]

Wagon Laagers and Marching Camps

Thracians also used to build temporary fortifications if no hill fort was available. For this they used wagons or palisades. Arrian describes how 'a large force of natives under arms and the free Thracians' defended a mountain pass against Alexander. 'They had collected large numbers of carts, which they intended to use, if they were hard-pressed, as a sort of defensive palisade, with the further idea of sending them crashing down upon the Macedonian phalanx as the men were climbing the steepest part of the slope.' This use of wagons is hardly surprising when you consider their proximity to the 'wagon-dwelling Skythians.'

Xenophon describes how in 399BC Odrysian Thracians built a fortified camp, with a 'stockade which was only about the height of a man':

> … a force of Odrysians came to [the Greek commander Dercylidas, in Bithynia] as allies from Seuthes from the other side of the strait …

> These troops of Seuthes built a camp and fortified it with a stockade about two and a half miles from the Greek camp.[71]

The way this event is described shows that Xenophon did not think there was anything unusual about this behaviour. However, this is the only instance known when Thracians built a fortified camp, so it is unknown if this was general practice. Alexander surprised the Triballi when they were occupied in pitching camp, but Arrian doesn't say if the camp was fortified or not.

Sieges

The Thracians had no siege train, and took towns and forts by starvation or assault. Thus, during his invasion of Macedonia, Sitalkes took Idomene by assault, Gortynia, Atalanta, and some other places by negotiation, but his siege of Europus failed. After plundering all Macedonia and appropriating a lot of booty the Thracians turned against the Greek cities in Chalkidike, but the inhabitants shut themselves inside their walls, and he had to be content with plundering their territory for eight days.[72] In 424BC Sitalkes attacked the Triballi and died fighting them, probably during an attack on one of their fortifications. Byzantium was besieged by Thracians, but relieved by Clearchus, who landed cavalry and hoplites in their rear from ships.[73] Lysimachus' former capital, Lysimacheia, was assaulted and destroyed by the Thracians in 197BC during the Second Macedonian War.[74]

According to Frontinus the Thracians sometimes used tricks to break a siege. He says

> When the Thracians were besieged on a steep mountain inaccessible to the enemy, they got together by individual contributions a small amount of wheat. This they fed to a few sheep which they then drove among the forces of the enemy. When the sheep had been caught and slaughtered, and traces of wheat found in their intestines, the enemy raised the siege, imagining that the Thracians had a surplus of wheat, inasmuch as they fed it even to their sheep.[75]

The Dii, Odrysai, and Koilaletai launched an uncoordinated revolt against the Romans and their Thracian client king during AD 21. The largest proportion, and the most disciplined (equipped with Roman weapons), besieged King Rhoemetalces in Philippopolis. The rest crossed the Haemus range to stir up more remote tribes, or went roaming in quest of plunder or

of reinforcements. When the Roman commander learnt about this, he sent some allied cavalry and light infantry to attack the latter, while he marched in person with the main body to raise the siege. The pillagers were cut to pieces; dissensions broke out among the besiegers, and the king made a well-timed sally just as the legion arrived. The revolt was crushed and the disorganized besiegers were slaughtered without loss to the Romans.[76]

The most detailed account of a defence of a Thracian hill-fort is provided by Tacitus, from a rebellion in the Haemus Mountains in AD 26.[77] The rebellion was crushed by a legion plus 'other available troops', auxiliaries and allied Thracian troops – an army of at least 12,000 men:

> **46.** [In AD26], triumphal decorations were voted to Poppaeus Sabinus, for crushing the Thracian tribesmen, who, on their mountain peaks, lived uncivilized, and were proportionately as bold. The cause of the insurrection, apart from the temper of the insurgents, was that they refused to tolerate the military levies and to devote the whole of their able-bodied manhood to the Roman service. Their obedience, indeed, even to their kings was usually a matter of caprice, and the occasional contingents they sent were led by their own chiefs and acted only against neighbouring clans. In this case, too, a rumour was as current that the clans were to be broken up and incorporated with other stocks, then dragged into distant countries. Still, before appealing to arms they sent a deputation to insist on their former friendship and loyalty. 'Both' they said, 'would be continued if they were not tried by fresh impositions. But if they were sentenced to slavery as a vanquished race, they had steel and young men, and souls resolute or freedom or for death.' At the same time they pointed to their strongholds perched upon the crags, and to the parents and wives placed in them for refuge, and threatened a war intricate, arduous, and bloody.
>
> **47.** Sabinus, till he could muster his forces, returned soft answers; but when Pomponius Labeo arrived from Moesia with a legion, and King Rhoemetalces with a body of native auxiliaries who had not renounced their allegiance, he added his own available troops and moved against the enemy, by now concentrated in the wooded gorges. A few, more daring, showed themselves on the open hills, but were driven from them without difficulty, when the Roman commander advanced in battle-order, though cover was so near that little barbarian blood was spilt. Then, after fortifying a camp on the spot, Sabinus with a strong detachment made himself master of a narrow mountain- ridge running

without a break to the nearest tribal fortress, which was held by a considerable force of armed men and irregulars. Simultaneously he sent a picked body of archers to deal with the bolder spirits who, true to the national custom, were gambolling with songs and war-dances in front of the rampart. The bowmen, so long as they operated at long range, inflicted many wounds with impunity; on advancing closer, they were thrown into disorder by an unlooked-for sally, and fell back on the support of a Sugambrian cohort [One of four or five auxiliary cohorts of the name, recruited on the Rhine bank], drawn up a short distance away by the Roman general, since the men were prompt in danger, and, as regards the din produced by their songs and weapons, not less awe-inspiring than the enemy.

48. The camp was then moved a stage nearer the adversary; and the Thracians, whom I mentioned as having joined us, were left in charge of the earlier lines. They had licence to ravage, burn, and plunder, so long as their depredations were limited to the daylight and the night spent safely and wakefully behind entrenchments. At first, the rule was as kept; then, turning to luxury and enriched by their booty, they began to leave their posts for some wild orgy, or lay tumbled in drunken slumber. The enemy, therefore, who had information of their laxity, arranged two columns, by one of which the raiders were to be attacked, while another band demonstrated against the Roman encampment; not with any hope of capture, but in order that, amid the shouting and the missiles, every man engrossed by his own danger might be deaf to echoes of the other conflict. Darkness, moreover, was chosen for the blow, so as to intensify the panic. The attempt on the earthworks of the legions was, however, easily repelled: the Thracian auxiliaries, a few of whom were lying along their lines, while the majority were straggling outside, lost their nerve at the sudden onset, and were cut down all the more ruthlessly because they were branded as renegades and traitors carrying arms for the enslavement of themselves and their fatherland.

49. On the following day, Sabinus paraded his army in the plain, in the hope that the barbarians, elated by the night's success might venture battle. As they showed no signs of descending from their stronghold or from the adjacent hills, he began their investment, with the help of the fortified posts which, opportunely enough, he was already constructing; then drew a continuous fosse and breastwork, with a circumference of four miles; and lastly, step by step, contracted and tightened his lines of

circumvallation, so as to cut off the supplies of water and forage; while an embankment began to rise, from which stones, spears, and fire-brands could be showered on the no longer distant enemy. But nothing told on the defence so much as thirst since the one spring remaining had to serve the whole great multitude of combatants and non- combatants. At the same time, horses and cattle – penned up with their owners in the barbarian style – were dying for lack of fodder; side by side with them lay the bodies of men, victims of wounds or thirst, and the whole place was an abomination of rotting blood, stench, and infection.

50. To the confusion was added the last calamity, discord; some proposing surrender, some to fall on each other and die; while there were those, again, who commended, not unavenged destruction, but a last sortie. Others, and not the multitude only, dissented from each of these views: one of the leaders, Dinis, now advanced in years, and familiar through long experience with the power and the clemency of Rome urged them to lay down their arms – it was the one resource in their extremity – and took the initiative by placing himself, his wife, and his children, at the disposal of the victor. He was followed by those who laboured under the disabilities of age or sex, or who were more passionately attached to life than to glory. On the other hand, the younger fighting men were divided between Tarsa and Turesis. Both were resolute not to outlive their freedom; but Tarsa, crying out for a quick dispatch, a quietus to hope and fear alike, gave the example by plunging his weapon into his breast: nor were others lacking to choose the same mode of death. Turesis and his followers waited for the night: fact of which the Roman commander was not ignorant. The outposts, accordingly, were secured by denser masses of men. Night was falling with a storm of rain; and the wild shouting on the enemy's side, alternating as it did with deathly stillnesses, had begun to perplex the besiegers, when Sabinus made a tour of his lines and urged the men to be misled neither by ambiguous sound nor by simulated quiet into giving the ambuscaded foe his opening: every man should attend to his duties without budging from his post or expending javelins on an illusory mark.

51. Meanwhile, the barbarians, speeding down in their bands, now battered the palisade with hand-flung stones, stakes pointed in the fire, and oak-boughs hewn from the tree: now filled the moats with brushwood hurdles, and lifeless bodies; while a few with bridges and

ladders, fabricated beforehand, advanced against the turrets, clutching them, tearing them down, and struggling hand to hand with the defenders. The troops, in return, struck them down with spears, dashed them back with their shield-bosses, and hurled on them siege-javelins and piles of massive stone. On each side were incentives enough to courage: on ours, the hope that victory was won, and the more flagrant ignominy which would attend a defeat; on theirs, the fact that they were striking the last blow for deliverance –many with their wives and mothers close at hand and their lamentations sounding in their ears. Night, screening the audacity of some the panic of others; blows dealt at random, wounds unforeseen; the impossibility of distinguishing friend from foe; cries echoed back from the mountain ravines, and so coming apparently from the rear – all this had produced such general confusion that the Romans abandoned some of their positions as forced. Yet actually none but handful of the enemy made their way through; while the remainder, with their bravest either dead or disabled, were at the approach of daylight pushed back to their stronghold on the height, where surrender at last became compulsory. The districts adjoining were taken over with the concurrence of the inhabitants: the rest were saved from reduction, whether by assault or investment, by the premature and stern winter of the Haemus range.

Chapter 8

Battles and Tactics

The Army on Campaign

Sitalces' Invasion of Macedonia, 429 BC[1]

The Odrysian king Sitalkes started with a small domain but spent his life expanding it. He fought a campaign against the Paeonians, died fighting the Triballi, and had a confrontation with the Skythians. By the beginning of winter 429BC, Sitalkes had managed to unite Thrace south of the Danube. He determined to conquer chalkidike and put his own candidate on the Macedonian throne. He gathered his troops and 150,000 warriors poured into Macedonia, carrying all before them. Sitalkes had a road constructed along part of the route (over the desolate range of the Cercine Mountains that divided the Sintians and Paeonians), to speed their passage. The army was composed of roughly one-third heavy and light cavalry (the latter mostly javelin armed, but with a good proportion of Getic horse archers), and two-thirds peltasts and light infantry. Travelling with the army were Amyntas, the nephew of the Macedonian king Perdiccas, and Hagnon, an Athenian general. Sitalkes proposed to install Amyntas as the new King of Macedonia, while Hagnon was to command the allied Athenian fleet and army. The order of battle for this army is therefore something like this (the first sets of figures are maximums; a more realistic set of figures is included in the tables):

Generals

- Commander-in-Chief: Sitalkes and his bodyguard – 500 heavy cavalry, armed with javelins and swords and wearing bronze cuirasses, greaves,

and helmets. Sitalkes may be characterized as a skilful, brave, and adventurous, but not rash general;[2]
- Seuthes, his sub-commander – a cautious general, equipped like Sitalkes, and possessing a small bodyguard of heavy cavalry;
- Amyntas, Macedonian ally-general (nephew of the Macedonian king Perdiccas) with a small bodyguard, equipped the same as the Thracian generals;
- Hagnon, athenian ally-general, with a small bodyguard, equipped as a hoplite;
- There would also have been other princes commanding each tribe, most related in one way or another to Sitalkes.

Cavalry
- 25,000 Odrysian cavalry – light cavalry armed with javelins, swords or knives, and armoured only with shields;
- 20,000 Getic cavalry – commanded by a prince and his 300 heavy cavalry bodyguard, wearing scale armour and greaves, and armed with swords and javelins. Some of these might also be equipped with bows. The rest of the cavalry would be light cavalry armed with bows and swords or knives and armoured only with shields. Some would be armed with both javelin and bow, and a small number with javelin only. We shall say 15,000 bow-armed cavalry, 700 armed with javelins and sword only, and 4,000 armed with javelins, bows, and swords or knives;
- 4,500 cavalry from other tribes (e.g. the Paeonians) – light cavalry armed with javelins and swords and armoured only with shields;

Infantry
- 41,000 Odrysians – 500 archers, 500 slingers, 10,000 javelin-men (some acting as *hamippoi*) and 30,000 peltasts armed with long spears or javelins, and swords or knives;
- 5,000 Dii – the best infantry in the army – peltasts armed with swords (possibly some form of *rhomphaia*) and javelins;
- 6,000 Bessi and other mountain tribes – the second-best infantry in the army, with 4,000 armed like the Odrysian peltasts, 1,000 light javelin-men, 500 slingers, and 500 bowmen;
- 6,000 mercenaries – peltasts of similar quality to the Bessi but with more experience;
- 30,000 hangers-on – women, children, sutlers, and slaves;
- 1,000 Agrianians – high quality javelin-men;

- 2,500 Paeonians (including Laeans): 2,000 average quality peltasts and 500 bowmen;
- 3,000 Treres and Tilateans: 500 javelin-men and 2,500 peltasts mainly armed with long spears;
- 3,000 Sintians and Maidi: 500 javelin-men and 2,500 peltasts armed with javelins, long spears and/or daggers;
- 5,500 other tribes not mentioned (Thynians, Apsinthii, Ciconians, Edonians etc) – 500 javelin-men, 5,000 peltasts.

How realistic are these figures? Strabo said at the beginning of the first century AD that Thrace south of the Danube could send into the field 15,000 cavalry and 200,000 infantry.[3] If there is any truth to Herodotus' statement that there were about a million Thracians, it would allow an army 100,000 to 200,000 strong. Yet most modern commentators would immediately reject the 150,000 figure (or Diodorus' 120,000 infantry and 50,000 cavalry[4]) as ridiculous. This would make the Thracian army similar in size to the large tribal armies that fought against the Romans (e.g. the Celts), not a great deal smaller than the Persian army at Issus, and bigger than the Persian army at Granicus.

Table 5: Sitalkes' cavalry.

Troops	*Heavy Cavalry*	*Light Cavalry*			*Total*
		Javelin-armed	*Horse Archers*	*Bow javelin*	+
Odrysians	800	12,200			13,000
Getai	400	1,000	7,600	1,000	10,000
Other tribes e.g. Paeonians	200	3,800			4,000
Total	1400	17,000	7,600	1,000	27,000

Table 6: Sitalkes' 100,000 Infantry.

Troops	*Peltasts*	*Javelin-men*	*Archers*	*Slingers*	*Other*	*Total*
Odrysians	20,000	7,000	500	500		28,000
Getai	8,000	1,000	1,000			10,000
Dii	5,000					5,000

Bessi and other mountain tribes	6,000	1,000	500	500		8,000
Mercenaries	6,000					6,000
Agrianians		1,000				1,000
Paeonians (including Laeans)	2,000		500		500	
Treres and Tilateans	2,500	500			3,000	
Sintians and Maidi	2,500	500				3,000
Other tribes	5,000	500				5,500
Hangers-on					53,000	53,000

The cavalry figures are perhaps the key to determining the actual numbers involved. One third of 150,000 would make 50,000 cavalry, a figure that was rarely matched in any ancient battle. A more realistic figure would be reached by halving that figure and adjusting the infantry figures accordingly. This gives a cavalry number similar to that fielded by the Persians at the Granicus (20,000 to 25,000) or the Skythians at the River Thatis (310BC, 25,000 to 30,000).[5] Alexander was initially only able to field about 6,000 cavalry in his army, but he was short of money, was not a tribal leader, and his cavalry (which mostly came from Macedonia and Thessaly anyway) had a much higher proportion of heavy cavalry. It has to be remembered that the Thracian numbers were for tribal levies, not an organized conscription. Thucydides says that men volunteered for the task, indicating that it was a popular campaign. The timing of it may have been bad for other reasons but it also meant that the harvest was over and lots of men were free to leave their farms. The Odrysians could be expected to field every available man, and other tribes may have made similar efforts.

If we compare numbers, we find that Seuthes' rebel Odrysian army may have included 14,000 Thracian troops (these would have included neighbouring tribesmen such as the Apsinthii and Bessi) in addition to Xenophon's Greeks. The Triballi had 30,000 men when they marched to Abdera with just part of their army (376/5BC).[6] Probably when they fought against Alexander their army was again about 30,000 strong, as to expect to

successfully oppose him they would have matched or exceeded Alexander's army in size. The Getai alone could raise 10,000 infantry and 4,000 cavalry to oppose Alexander. Appian says[7] that the Getai provided 10,000 foot and 10,000 cavalry as mercenaries to Perseus' army. The Odrysai fielded 8,000 horse and 20,000 foot against Lysimachus.[8] The four tribes (Asti, Caeni, Maduateni, and Coreli) who attacked the Romans returning from Magnesia[9] comprised 10,000 men, probably nearly all infantry.

These figures mean that the Thracian army's numbers must have included a certain number of camp followers. In particular, the cavalry figures seem vastly over-estimated. We know that there was a vast number of Thracian troops as Thucydides said the Macedonian cavalry gave up attacking them because they were simply too numerous. He also says that no attempt was made to meet the Thracians in battle by the people living in walled cities. The army was also so big that news of its advance spread rapidly throughout Greece, so that even in the Peloponnese they discussed what to do if it advanced further south. The breakdown of figures above shows it is possible to reach the 150,000 figure through large and small contributions by many tribes, and by assuming a large number of hangers–on. Thucydides' statement that the Thracians had nothing to match the Macedonian heavy cavalry is not supported by archaeology, so the Thracian heavy cavalry must have been somewhere else (or in too small a number to offer resistance) when the Macedonians attacked. The king and his entourage would have attended the celebrations to mark the installation of their claimant to the Macedonian throne – perhaps that's where the Thracian troopers were, drunk at a feast.

Alarm spread throughout Greece. The peoples of central and northern Greece prepared for war; terrified Athenian enemies further south discussed what to do in the face of a combined Athenian–Thracian army. However, Sitalkes reached the Chalkidian peninsula (the three-tongued land spit near Thessaloniki) to find that no Athenian army and fleet awaited him. Maybe (as Thucydides says) the Athenians didn't expect Sitalkes to fulfil his promise to attack the Chalkidian cities, or because the Athenians were frightened by the size of Sitalkes' army, or it was too late in the year for the ships to sail north. Without the Athenians, Sitalkes was unable to take the Chalkidian cities. Instead, he forced the inhabitants to retire behind their fortifications while he ravaged their land for eight days. At the same time, as his army was running short of food and suffering from cold, he opened negotiations with Perdiccas.

Perdiccas bribed Sitalkes' nephew and second in command, Seuthes, to

advise a retreat. Sitalkes took Seuthes' advice, and, after only thirty days, the campaign ended. Seuthes later married Perdiccas' daughter and succeeded Sitalkes, but was unable to keep Sitalkes' empire intact.

The 10,000 in Thrace – Seuthes' Rebellion, 400BC[10]

In winter 400, Xenophon visited Seuthes II in his *tyrsis* (fortified palace). He was asked to help Seuthes in a short-term operation in southeastern Thrace against the Thynians and other Thracians who had broken away from him. The plan was to take the Thyni by surprise, by marching at night (Seuthes had been on many night marches) and falling on them the next day. To keep the army together, at Xenophon's suggestion, the hoplites marched at the front of the column, and Seuthes' armoured cavalry and peltasts at the rear. When day came, the cavalry and peltasts moved to the front. By midday they had crossed the mountains, and the troops were then unleashed upon the villages.[11] The attack was a great success, but Seuthes' men scattered in pursuit, so Xenophon and the younger Greeks seized the heights, while the older Greeks occupied the villages. Having gathered a large amount of booty, they then pitched camp.

A large number of Thynians had abandoned their homes and fled to the mountains, so Seuthes burned down some of the villages, and threatened to do the same to the rest and their corn if they did not come back. The women, children, and older men did come down, but the younger men bivouacked in the villages under the mountain. So during the night Seuthes ordered the youngest of the hoplites to move off and make a dawn attack on these villages. Most of the villagers escaped, but the rest Seuthes shot down. Seuthes then resolved to, in effect, lay siege to the mountain men. To cut off their food supplies, he encamped on the plain, while the Greeks took quarters in the uppermost village below the summit. The ground was covered in deep snow and the Greeks were so cold they got frostbite. They envied the Thracians' traditional clothing. After a few days the Thynians sent hostages and opened negotiations, but in reality they were just spying.[12]

The Thynians attacked the following night. As the Greeks were occupying their houses they knew exactly where to go. The Thracians were guided past the high fences made of wooden stakes that surrounded each house (to keep in the cattle). They threw javelins into the houses, set them on fire, knocked off Greek spearheads with clubs, and taunted Xenophon to come out and be killed. When, at a trumpet signal, the Greeks leapt out with swords drawn, the Thracians ran away. They swung their shields

around behind them but some of them who tried to jump over the fences caught their shields in the stakes and were captured hanging in the air. Others missed the ways that led out of the enclosures and were killed. The Greeks suffered only a few casualties when some of the Thynians turned about and hurled javelins at men who were running past a burning hous

At this point, Seuthes arrived with seven bodyguard cavalry and his Thracian trumpeter. The latter had helped scare off the Thynians by the continual sounding of his horn. Seuthes agreed to help Xenophon attack the Thynians on the mountain the next day, but when the Thynians saw the masses of hoplites, peltasts, and horsemen moving to attack them they offered to surrender. Seuthes now had a force three times as large as before, for the Odrysians wanted a part in Seuthes' success.[13] Unfortunately Seuthes had obtained Xenophon's services almost as a king without a kingdom, and he was unable to pay anything like the agreed wages.

Seuthes had promised to give 'the men in the ranks a Cyzicene and to the captains and generals the customary pay.'[14] He also promised to give the coastal fortresses of Bisanthe, Ganos, and Neonteichos to Xenophon. Instead they got three pairs of mules, some oxen, and wages for twenty days out of the month owing. In addition, they later got what Seuthes claimed to be his entire portable wealth: a talent, 600 cattle, 4,000 sheep, and nearly 120 slaves.[15] According to Youroukova, one talent would only pay the wages of 230 ordinary mercenaries for one month at the agreed rate.[16]

Nevertheless it was still winter and the Greeks were far from home or any friendly Greek port, so they were prevailed upon to continue the campaign. They marched down from the mountains to the coast and then turned northwest, keeping the Pontus on their right as they subdued the country of the 'millet–eating Thracians', finally arriving at Salmydessus. At Salmydessus the Thracian army turned around and marched about 60km southwest to Selymbria (50km west of Byzantium, on the north coast of the Sea of Marmara/Propontis). They camped nearby, on a plain about thirty *stadia* from the coast. By that time Seuthes had an army larger than the Greek army; for more and more of the Odrysians had come down from the interior, and these were augmented by the newly conquered people, who also joined the campaign. The Greeks had been campaigning for nearly two months in a harsh winter, and still had not been properly paid. They began to make more strident demands for pay, so Seuthes began to look for ways to be rid of them.[17] He was in luck, as the Spartans now sent envoys offering full pay for a war against the Persians. The pay would be a daric

per month for every man, twice as much for the captains, and four times as much for the generals. After some negotiation, in which Seuthes tried to get Xenophon to stay with 1,000 hoplites, the Greek army departed with the Spartans for Asia.

Order of Battle

The combined army was composed of armoured cavalry, light cavalry, peltasts, javelin-men, and hoplites.[18] The 6,000 Greeks were mainly hoplites, but included nearly 1,000 peltasts, javelin-men, and slingers, and 40 cavalry.[19] Before the Battle of Cunaxa there were 10,400 hoplites and 2,500 peltasts (including many Thracians) in the army, but although Diodorus Siculus says[20] 8,300 survived to reach the Bosporus, they then split up, and when they get to Thrace, their number had dwindled to 6,000.[21] The *Anabasis* says '...and with Xenophon there were about seventeen hundred hoplites and about three hundred peltasts.[22] Xenophon was the only one who had cavalry, a force of about forty horsemen.'[23] Xenophon later repeats the number of Greek horsemen, saying 'Seuthes then went off, and Timasion, with about forty Greek horsemen, went with him.'[24] We shall say, therefore, that the Greek force comprised 5,000 hoplites, 40 heavy cavalry, 800 peltasts, and 160 slingers and bowmen.

At the end of his campaign, Seuthes had at least a similar number of Odrysian heavy cavalry, as a bodyguard of thirty Thracian horsemen from the Odrysian heartland was to escort the Thracian prince Medosades back to his homeland.[25]There must have been plenty of such troops to spare, as there is no argument about their departure.

The Thracians were composed of Odrysians and Thracians from the newly conquered areas, i.e. Thyni (and possibly some Caeni, and Apsinthii). Most came of their own accord, on hearing of Seuthes' success, wanting a part of the loot. Seuthes had an army larger than the Greek army; and it grew until it tripled in size, as the news of its success spread. This could mean that Seuthes' army grew to a strength of around 20,000 men, including the Greeks.[26] Such an army could have had, in addition to the Greeks, around 4,000 Odrysian light cavalry, 500 heavy cavalry, 500 archers and slingers, 7,000 peltasts, and 2,000 javelin-armed lighter infantry.[27] These figures are based on the assumption that cavalry formed about one-third of the army, peltasts formed the bulk of the troops, and the remainder were lighter infantry, with archers predominating over slingers.

Xenophon describes how the Greeks were able to plunder the Thracians with impunity but were unable to take very much as the peltasts and light cavalry dogged their heels and attacked them if they moved out in small

groups.[28] He says that once combined with the Thracian cavalry and light infantry they never saw an enemy, as the enemy were too busy running away from the light troops, and left more booty behind.

The Army in Battle

The Triballi Attack Abdera, 376 BC[29]

The Triballi were suffering from a famine, and more than 30,000 of them moved far from their homeland to the territory of Abdera. How they got there is a mystery, unless they did so with the connivance of Kotys, the reigning Thracian king. They ravaged the land near Abdera with impunity and after seizing a large quantity of booty they began making their way home. The Abderans had previously feared to face them due to their numbers but now they saw how the Triballi were retreating in a contemptuous and disorderly fashion so they marched out with their whole army against the rear of the column. They fell on the Triballi and slew more than 2,000 of them as they straggled in disorder homewards. This had no effect on the main body of the Triballi army except to enrage them and cause them to turn back in the hope of gaining revenge.

The local Thracians (Edonians, Bistonians, Ciconians, or Sapaeans) were glad to see the back of the Triballi, and sent some men to assist the Abderans. The latter, elated by their success and encouraged by the aid sent by their Thracian neighbours, drew up their lines opposite the Triballi. A stubborn battle took place, but the Thracians suddenly changed sides, and the Abderans, now left to fight alone and surrounded by superior numbers, were butchered almost to a man. The Triballi marched on to Abdera, and were about to lay siege to the city when the Athenian general Chabrias suddenly appeared with troops (disembarked from his fleet) and saved the Abderans from their perils. He drove the Triballi from the country, and put a considerable garrison in the city. Chabrias negotiated a peace between the Triballi and the king of Maronea, thus winning the Triballi to the Athenian side.[30]

Order of Battle

We may guess that the Triballi army (if it formed up in four ranks approximately equal in length) was composed of roughly equal proportions of skirmishers, peltasts, cavalry, and hangers-on. As the army was more than 30,000 strong this would give 500 bowmen, 500 slingers, 7,000 javelin-men, 8,000 peltasts, 500 heavy cavalry, 5,000 light cavalry, and 10,000 women, children, sutlers, and slaves. A higher-than-usual

proportion of the peltasts may have been armed with long spears. They briefly had some of the local Thracians as allies, and these must have been in considerable numbers to make up for the former disparity in numbers between the Abderan army and that of the Triballi. So for the final battle against Chabrias they could add 5,000 to 10,000 local Thracians on their side, but would have to subtract the 2,000 men lost in the first battle plus the losses from the second 'stubborn' battle.

Alexander's Invasion, 335BC (Arrian I.1.6)

The Battle of the Shipka Pass

On this occasion 'a large force of natives under arms and the free Thracians' defended a pass in the lower slopes of the Haemus Mountains against Alexander's army. They blocked his path with wagons, which, loaded with rocks, they also rolled down on the Macedonians. When the carts were rolled down the hill, they had little effect, as Alexander's troops either dodged them or hid under their shields as they rolled over. They then charged up the hill at the Thracians. Alexander then moved his archers to the front of his army, and they checked the Thracian attacks on the Macedonian left. The Macedonian infantry, including the foot guards, hypaspists, and Agrianians, had no trouble dislodging the Thracians due to their inadequate arms and equipment. In fact, the Thracians flung down their arms and ran for their lives even before the Macedonians came into contact. Some 1,500 were killed, but only a few captured; for most of them were too quick, and knew the country too well, to fall into their enemies' hands. The women, however, who had followed the fighting men, were all taken, together with the children and all the gear and stores.

Order of Battle

It seems that Alexander did not have to deploy his whole army to beat these Thracians. If we assume they suffered ten per cent losses then the force might be about 15,000 strong, including the women and children. It also seems that there was no need for cavalry. The fighting men were inadequately armed and equipped, so there were few that had any sort of armour. The only heavy cavalry in this army (if any) would be the tribal leaders themselves and one or two bodyguards. A general of some ability (or at least charisma) is suggested by the unusual tactics and the attempt to organize a defensive wall of wagons. There would be a scarcity of light cavalry due to the difficulty of using such troops in mountainous terrain. The success of the Macedonian archers indicates a paucity of Thracian

archers and a lack of effective shields amongst the Thracian warriors. In this army we therefore might have 5,000 camp followers, 10 heavy cavalry, 100 light cavalry, 50 bowmen, 500 slingers, 3,000 light javelin-men, 5,000 poor-quality badly armed peltasts, and 1,000 average quality or better armed peltasts – the 'free Thracians.'

The Battle of the Lyginus River, 335BC (Arrian 1.2–3)

The Battle of the Lyginus River, between Alexander the Great and the Triballi tribe, occurred in 335BC. The Triballi were threatening to cause mischief, so Alexander marched north and surprised them next to the Lyginus River, three days' march from the Danube. The majority of the Triballians had hurriedly retreated there. Syrmus, the king of the Triballi, took refuge on Pine Tree Island in the Danube, with the women and children, and his personal entourage. The neighbouring Thracians also took refuge on the island. The battle took place in July or June (the former month is more likely).

It was late in the day and Alexander found the Triballi occupied in pitching camp. Although caught napping, the tribesmen prepared to fight in the shelter of the wood by the river. Alexander immediately formed his infantry into column and advanced. He ordered the archers and slingers to run ahead and fire at the Thracians in the wood, in the hope of drawing them out from the shelter of the wood into open ground. They stood this for a short while, but when they began to feel the effect of the missiles, the tribesmen came surging forward to get to grips with the lightly armed Macedonian archers. Not only were the Triballi out in the open, but they were somewhat disorganized, as the right wing of the Triballi army rushed out well ahead of the rest of the army. Alexander ordered the cavalry from upper Macedonia to attack their right wing and the cavalry from lower Macedonia to advance against the Triballian left. The main body of infantry, preceded by the rest of his cavalry, he led against the enemy centre.

The Triballians held their own while the fighting was at long range. However, once they had been held by the weight and drive of the close-order Macedonian infantry, the cavalry began to ride them down in a fierce assault all over the field, and they broke and ran. They tried to make their escape through the wood to the river and most succeeded because the wood was very thick, and there was not enough daylight left for the Macedonians to see them. Three thousand were killed, but few were captured. The Macedonian losses were eleven men from the cavalry and about forty from the infantry.

Alexander then marched to the Danube. On the river he found warships awaiting him: they had come up across the Black Sea from Byzantium. He manned them with heavy infantry and archers, and, sailing for the island to which the Triballians and Thracians had fled for refuge, attempted to force a landing. Circumstances, however, were against him: the ships met with resistance at every point where they tried to run ashore; they were few in number and not strongly manned; in most places the island shore was too steep for a landing, and the current, sweeping past it through the narrows, was strong and very awkward to deal with. Alexander accordingly withdrew the ships, and determined instead to cross the river and attack the Getai who lived on the other side.

Order of Battle

The armies are not described in detail; the only indication of their sizes is that the Triballi army roughly matched Alexander's in frontage. We know this because he deployed on a broad frontage and spoke of the Triballi being more advanced in one sector than another. Since the Triballi lost 3,000 casualties but no prisoners due to the brief pursuit, if this was ten per cent of the army this could mean an army of 20,000 to 30,000 men (similar to that which marched to Abdera and similar to the size of Alexander's army). We may guess that the Triballi army (if it formed up in four ranks approximately equal in length) was composed of roughly equal proportions of skirmishers, peltasts, cavalry, and hangers-on. This would give 500 bowmen, 500 slingers, 7,000 javelin-men, 8,000 peltasts, 50 heavy cavalry, 5,000 light cavalry, and 5,000 camp followers. A higher-than-usual proportion of the peltasts may have been armed with long spears. The Triballi cavalry are not mentioned but they are hinted at when Arrian says the Macedonian cavalry unexpectedly charged to contact rather than shooting, as the Triballi cavalry would have done. Also, the Macedonian cavalry did not immediately begin to ride down the skirmishers, suggesting there were some other cavalry protecting them, cavalry who would have been successful in the skirmishing stage of the battle. Some of the cavalry may have been armed with lances. Neither the Triballi king nor his entourage were at the battle, so few heavy cavalry were present. The number of women and children is reduced because they had taken refuge on the island, and few Triballi were captured, but as they were setting up camp there would have been some present.

The Thracians held their own in the skirmishing part of the battle, which means that they were either superior in numbers or quality to the Macedonian skirmishers (who included the Agrianians). That they rushed

out to get to grips with the Macedonian archers, suggests that they did not have many archers or slingers of their own, or that the trees got in the way of their missiles. The failure of the infantry in hand-to-hand combat with Alexander's pikemen should be seen more as a testament to the superior quality and equipment of Alexander's troops rather than any lack of fighting spirit on the part of the Triballi. The strong Celtic influence on the Triballi, which is indicated by Celtic swords and a torc found in their domain, could mean that some of the peltasts fought like Celtic infantry. The use of *rhomphaias* by the Triballi is not attested, and none have been found in their territory. However, the Triballi were close to Dacian territory and had raided through the territory of the Bessi and other *rhomphaia* users, so a limited number might have used this weapon, or something like it.

The Battle of Raphia, 217 BC

This battle was fought between Antiochos III of Syria and Ptolemy IV of Egypt. Ptolemy won because Antiochos and his victorious cavalry right wing did not return to the field in time to save the rest of his army. Here, the right-flank Ptolemaic Thracians defeated the 2,000 left-flank Seleukid Thracians. There were 6,000 Thracians and Gauls in Ptolemy's army. Ptolemy's army included a 'Thracian' cavalry regiment. Antiochos had Indian elephants stationed on his left wing. Ptolemy also had heavy cavalry, 8,000 mercenary hoplites, and some African forest elephants on his right wing. Ptolemy's African elephants refused to charge Antiochos' Indian elephants but his Greek heavy cavalry evaded the elephants and attacked the Seleukid flank. Caught between the hoplites and the cavalry, this collapsed.[31]

The Thracian infantry that fought at this battle were equipped similar to the *thureophoroi*, the best being armoured with helmet, greaves, and *thureos* (and perhaps a quilted linen cuirass). Some may have been armed with *rhomphaia*s, which would mean that they would fit well with the Gauls as infantry ready to charge into combat rather than skirmish like their ancestors.

The Battle of Cynoscephalae, 197 BC – 'Peltasts in the Mist

At this battle, Philip V had 2,000 Thracians in his army. The battle started with peltasts and other light troops stumbling into one another in the mist along the top of a range of steep hills. The Macedonians had the advantage of higher ground and were soon pushing back the Romans. The Thracian peltasts won skirmishes against Roman and allied Greek troops, and helped

to push back the Roman left wing. This led to calls for reinforcements from both sides, precipitating the battle proper. On his own left flank, Philip was unable to deploy his phalanx in time. It was caught in the flank and shattered, and he lost the battle.[32] Here the Thracians and/or the Illyrians were Trallians.

The Battle of Magnesia, 190 BC, and its Aftermath.

The Prelude to the Battle

The Battle of Magnesia was the penultimate battle fought between Antiochos III of Asia and the Romans and their Pergamene allies. As a result of the battle, the Seleukid monarchy was permanently weakened, and Roman power extended into Asia Minor. Before the battle, Antiochos' armies retreated from Greece, and the Roman army followed them, passing through Thrace. Philip V was an ally of Rome at this stage, having lost the Battle of Cynoscephalae seven years before. He was eager to diminish Seleukid power, and helped the Romans enthusiastically. As the Romans travelled by a difficult road, he escorted them with his own troops to the Hellespont. He supplied them with food and money, repaired the roads, bridged the unfordable streams, and dispersed the hostile Thracians.[33] The Romans rested in Lysimacheia while they waited for their baggage train to catch up. They had also left sick men in villages all over Thrace, exhausted by illness and the length of the march.[34] When the sick and baggage had rejoined the army, the Romans marched through the Thracian Chersonese and were ferried across the Hellespont by their ally, King Eumenes of Pergamon.

The Thracians in the Battle

The Romans chased Antiochos to Magnesia (not far from the old Persian capital of Asia Minor, Sardis). Here, in 190BC, Antiochos met them in battle. He broke through the Roman left flank but instead of turning on the Roman army, pursued as far as the camp, where 2,000 Thracian and Macedonian infantry (who formed the camp guard) stopped him from capturing the Roman baggage.[35] The Thracian camp guard were armed with *rhomphaia*s.[36]

> The Romans became aware of the flight of their comrades in another part of the field and heard the shouts of panic now almost at the very camp... The camp commandant was Marcus Aemilius, a military

> tribune... When he saw the flight of his comrades, he met them with his whole guard, and ordered them first to halt and then return to the fight, reproaching them for their panic and shameful flight; then he went on to threats, warning them that they were rushing blindly to their own destruction if they did not obey. Finally he gave the word to his own men to cut down the leading fugitives, and with blows of the sword to drive back the mob that followed and make them face the enemy. This greater fear overcame the lesser; under the compulsion of the threat from both sides the fleeing troops first halted; then they went back to the fight, while Aemilius with his own guard – 2,000 brave men – energetically withstood the king [Antiochos], in his disorderly pursuit.[37]

This allowed the remainder of the Seleukid army (which included 1,500 Trallians) to be wiped out by the successful Roman right wing and centre. Using Thracians to cut down men from their own army was standard practice. If the Romans had put them at the back of their army because they didn't trust them, their actions soon changed the Roman commander's mind. Soon afterwards, the Romans campaigned against the Galatians, and then we find the Thracians leading the attack.

After the Battle of Magnesia: The Thracians Ambush the Roman Army

After the battle, the victors of Magnesia marched home through Thrace. This time Philip did not help them, and may indeed have alerted the Thracians to the fine pickings available. The Romans dreaded the march through that country, and were right to be concerned. Ten thousand Thracians drawn from the Asti, Caeni, Maduateni and Coreli tribes occupied each side of a narrow forested pass in the Hebros valley (in southeastern Thrace) and waited for the Romans to march through. The road, a narrow and rugged track, ran for about 16km through forests; because of the difficult going the Romans divided their army into two parts. The Thracians kept to their lines, waited until the vanguard had passed, then attacked the baggage, and, killing the escort, began to loot the wagons.[38] The Romans of the vanguard and rearguard rushed to help, and fighting began at several points. The Thracians ran up through paths with which they were familiar, or concealed themselves in the recesses of the rocks. The battle swayed from one side to the other according to the terrain, the numbers involved, and the courage of the combatants. The booty hampered the Thracians, as most of them left their arms behind so they could carry away more spoils. The unfavourable ground, on the other hand, made the Romans vulnerable to the Thracians. The fighting extended

practically the whole length of the pass. 'Many fell on both sides and night was already coming on when the Thracians drew off from the fight', explains Livy, 'not to escape wounds and death, but because they had as much plunder as they wanted.'[39]The next day it was found that the Romans had lost a portion of the pack animals and camp servants, a considerable number of Roman soldiers, and Q. Minucius Thermus, one of their senior officers.

Order of Battle

We know nothing about the composition of the Thracian army except that they were from four lowland tribes who lived in southeastern Thrace between the Hebros River and the Hellespont. The terrain which favoured their attack would not have favoured cavalry, so we can safely assume a lack of cavalry in the Thracian army. Cavalry would not have been completely absent, though, as they were lowland tribes, and anyway, there would be variations in the troops supplied between the four tribes because of differences in their territories. The Thracian army might therefore be 500 archers, 500 slingers, 1,300 javelin-men, 50 heavy cavalry (bodyguards for the four tribal chieftains), 600 light cavalry, and 7,000 peltasts. The peltasts seem to have been well equipped, as they gave the Romans a hard time. The best would be armoured with helmet, greaves, and *thureos* (with perhaps a quilted linen cuirass) and equipped with *rhomphaia*, sword, and javelins. The worst would be armed like the Thracian peltasts of old.

When the Romans marched into another precipitous pass, the Thrausi tried to get their share of the plunder, but this time the terrain was bare of trees and did not allow an ambush. The Romans could see them from a long distance away, and were prepared for them. Charging in close order, they drove the Thracians back and then put them to flight. The narrowness of the pass crowded the fugitives together, and there was much slaughter.[40]

The Romans regarded the Thracians as formidable, owing to their ferocity and physical strength, and marched warily on for a few days.[41] Then when they had reached more open ground 15,000 Thracians sought to oppose Muttines the Numidian, who was scouting ahead of the main army. He had 400 Numidian cavalry and a few elephants. Muttines engaged the Thracians with his elephants in the centre and cavalry on the flanks. Muttines' son, with 150 picked troopers, rode through the middle of the Thracians, then attacked their rear, and created such disorder amongst them that they never got near the main body of infantry.[42] This story of victory despite odds worse than ten to one against an unnamed tribe is hardly believable. Perhaps the real size of the Thracian force was 1,500 men. The

story is at least consistent, though – the cavalry were on the flanks of the Numidians but only reached the centre of the Thracian line, so clearly the Thracian army was much bigger than the Numidian force and overlapped them. Perhaps the Numidians were successful because the Thracians hadn't seen elephants before.

The Numidians may have been able to ride through the Thracians because the Thracian force was composed of infantry in the centre. They may have adopted the same tactics used at Cunaxa, of allowing the enemy cavalry to ride through them while subjecting the cavalry to showers of javelins.

The Thracians Attack the Galatians on Mt Olympus[43]

A year after the Battle of Magnesia, the same Thracians that were in that battle in the Roman army are reported to have lead the Roman army up a steep slope against the Galatians. The Galatians occupied two mountains near Ankara. The Romans divided their force into three columns of light troops backed up by heavy infantry and marched up the south slope of the first mountain (Mt Olympus).[44] They were met near the summit by 4,000 men who tried throwing rocks and whatever was to hand at the Romans, but suffered terribly from the fire of the *velites* and Pergamene skirmishers sent to shoot at them. The Galatians were forced to retire to their camp, where their army drew up in front of the ramparts, only to be thrown back inside by another hail of missiles. More shooting inside the camp caused further casualties and the Gauls ran out the back of the camp as the Romans broke in the front. The Galatians lost 10,000 to 40,000 men in the pursuit. The battle was a Roman victory due to the variety of their weapons and the hail of missiles they were able to throw at the Galatians.

The Thracians' armament is not described but they are listed separately from skirmishers, archers, and Trallians (who were slingers). The skirmishers are said to have been armed with a large 'Spanish' sword, javelins, and a large shield, so the Thracians were presumably different. The prolonged exchange of missiles (including javelins, which are specifically mentioned) and the Thracian position with the other skirmishers means that the Thracians were armed with javelins. The fact that they are not lumped in with the other skirmishers means that they were also armed with something different i.e. the *rhomphaias* with which they were equipped at Magnesia.[45]

The Battles of Kallinikos, 171 BC, and Pydna, 168 BC

Philip V's son Perseus rebuilt the Macedonian army to a strength of 43,000 men, and was soon at war with the Romans again, in the Third Macedonian War. His army included Kotys, king of the Odrysai with 1,000 picked cavalry and about 1,000 infantry.[46] There were also 3,000 'free Thracians under their own commander' plus 3,000 Paeonians, Agrianians and Thracians in his forces.[47] Thus a quarter of his cavalry and a fifth of the infantry was Thracian.

The Battle of Kallinikos, 171BC[48]

This battle took place in the early stages of the war near Larissa. The Macedonians encamped about 19km from the Roman camp. On each of several days the Macedonians appeared about the same time in front of the Roman camp, skirmished, then withdrew. Then Perseus moved his camp 11km closer and surprised the Romans by appearing at dawn the next day. He drew up his army near Kallinikos hill about 1.5km from the Roman camp. Both sides drew up their best cavalry in the centre, flanked by cavalry mixed with light-armed troops. The Macdeonian phalanx was behind the other troops. The Romans had been forced to draw up their lines hastily and they were in some disorder. Their heavy infantry stayed behind the camp rampart. The Roman forces included 1,000 Pergamene cavalry and 4,000 infantry; 500 Aetolian cavalry; 400 Thessalian cavalry; 300 cavalry and 100 infantry from Apollonia Illyrica; and 1,500 light-armed infantry from the Achaean League. The Roman cavalry itself was 2,000 strong, so the Romans' cavalry force was slightly larger than that of the Macedonians.

The battle began with a charge by the Macedonian left wing. There the Thracians fought 'like wild beasts who had long been kept caged,'[49] defeating the Italian allied cavalry. The Thracians used their *rhomphaia*s to cut off the horses' legs, and to pierce their loins.[50] The whole Roman right wing was thrown into confusion. Meanwhile Perseus, supported by a royal infantry battalion, forced back the elite Roman cavalry and the Aetolian cavalry in the centre with his first charge and routed them. They were saved by the 400 Thessalians, who kept formation and enabled most of the defeated cavalry to escape. In this part of the engagement the Romans lost 200 cavalry and 2,000 infantry killed, and 600 taken prisoner. The Romans were only saved from complete disaster when Perseus observed the legions advancing from the camp, and called off the pusuit. The Thracians returned to camp swaggering and singing, with severed heads stuck to their *rhomphaia*s as trophies.[51] That night the Romans retreated to the other side of the River Pineus, thus surrendering control of the capital of the

Thessalian League, Larissa, to the Macedonians.

The Battle of Pydna, 168BC, and the Pydna Monument

Prior to this battle, the Macedonians held a fortified river line but the Romans were able to get around it, so Perseus retreated to a plain near Pydna. Perseus now had 38,000 infantry and 4,000 cavalry. The Romans had about 37,000 men (including Pergamene, Itlalian and Numidian allies, and 200 Thracian and Cretan archers) and 34 elephants. The Romans initially refused battle and pitched camp on rough ground. The next day Perseus' riverbank guard of 800 Thracians precipitated the engagement after an argument midstream over a baggage animal that had escaped its Roman groom.[52] 'While three soldiers were chasing him through the water, which was about knee-deep, two Thracians dragged the animal from midstream to their bank; the Romans went after them, killed one of them, recaptured the animal, and went back to their post.' At first a few of their fellow Thracians, enraged by the killing right in front of them, crossed the river intent on revenge; then more followed. Finally the whole force started fighting with the Romans' Italian allies. Perseus reinforced them, finally bringing out his entire army and marching rapidly towards the Roman camp. Tall Thracian infantrymen led the Macedonian army out of camp.[53] They wore black tunics and greaves, carried glittering shields and carried *rhomphaia*s over their right shoulders. Their appearance particularly impressed the Roman commander as being the most terrifying of all the troops.The Thracian infantry were probably deployed on the Macedonian left flank.[54] Next to march out were the Greek mercenaries, then the royal bodyguard,

> ablaze in gilt armour and new crimson cloaks. And as these took their post, the phalanxes with bronze shields emerged from the trench and filled the plain with the flashing of steel and the shining of bronze, and all the hills around with a noise and the shouting of commands[55]

The Romans began the battle with a charge by the elephants and Latin allies on their right wing, which broke their opponents. In the centre, the phalanx pushed back the Roman infantry and their Italian allies until they reached the rough ground near the Roman camp. The Roman infantry was then able to make its way into gaps in the phalanx and use their deadly swords. At the same time, the Roman right–wing troops probably began to take the phalanx in the flank and rear. Three thousand elite phalangites fought to the death, but the rest broke and ran. The battle was over in an

hour, but almost all the Macedonian infantry were killed or captured.

The performance of the Thracian cavalry was less than remarkable – they are only mentioned when following Perseus in the flight.[56] Full accounts of the battle by Polybius and Livy have been lost, so what they did during the battle is unknown.[57] Nevertheless, the cavalry (deployed on the Macedonian right with the Royal Guard) survived the battle virtually unscathed, which means that they were held back in reserve and ran away without a fight; or must have made a good account of themselves, as they were outnumbered and probably had to face elephants and the more heavily armoured Pergamene cavalry.

After this battle Thrace west of the Hebros River was incorporated into Macedonia, which was partitioned and reduced to the status of a Roman province.[58] From now on Thracian kings used Roman troops to secure their regime, acted only with the approval of Rome, and their children were held hostage at Rome.[59]

When he visited Delphi in the summer of the following year, the Roman commander, Aemilius Paullus, saw some column-bases which Perseus had intended to use for victory monuments. On these Aemilius cheekily set up his own Pydna victory monument. This consisted of an equestrian statue with a large base with reliefs portraying the battle on all sides. N G L Hammond says that the relief on the north face seems to portray the clash which led to the battle. In the centre of the relief is a horse without harness or rider,[60] which corresponds with 'the unbridled horse' in Plutarch's *Aemilius Paullus* that the Thracians tried to recapture, at the start of the battle.[61] On either side of the horse, fighting is portrayed between scattered cavalrymen and infantrymen. Three figures to the right of the horse is a Thracian infantryman[62] on one knee (as his lack of a helmet and short trousers suggest), and two Thracian cavalrymen[63] with a distinctive cross-rib on the front of the large circular shield which one is carrying. They are fighting a cavalryman on the left side of the horse. The east face again shows a mounted Thracian (or Macedonian) cavalryman[64] carrying a large circular shield with the distinctive cross-rib.[65] An Italian infantryman[66] is thrusting his long oval shield at him.

Thracian Tactics

The Thracians were exceptionally mobile and able to rely on heavy javelin and some archery fire.[67] At the Battle of the Hydaspes, Curtius says 'Alexander sent the Agrianians and Thracian light-armed against the elephants, for they were better at skirmishing than fighting at close quarters. These released a thick barrage of missiles on both elephants and

drivers...'[68] Hence their preferred tactic was to skirmish; their wooded and hilly terrain was well-suited to this ploy.[69] These tactics were often successful, mainly when their opponents lacked light troops; they outnumbered their opponents, or caught them in suitable terrain. They liked ambushes like that on the Roman column after Magnesia, or night attacks under cover of darkness, like that on Mardonius' Persians.

The Thracians invented the peltast style of fighting, which the Greeks initially had trouble counteracting, especially in difficult terrain.[70] For example, the Bithynians set upon some Arcadians of the 10,000, and 'For some time, the Greeks marched and fought back at the same time, but at a place where they had to cross a watercourse, the Thracians routed them and killed the whole lot.'[71] The Thracians followed up this success with an attack on the hill where the Greeks were encamped, and were able to repeat their victory since the Greeks did not have any missile troops. When the Greeks charged, they easily evaded them, and shot at them from the flanks. Spartan hoplites suffered the same fate at Sphacteria in 425, and Lechaeum in 390 (though the number of Thracians present at Lechaeum, if any, is debatable).[72]

To counter these tactics, the Greeks created their own peltasts, and developed special hoplite tactics.[73] The youngest and fittest hoplites, the *ekdromoi*, were selected to charge out of the phalanx and try to catch the peltasts. Consequently, Greek states hired fewer Thracian mercenaries from the fourth century onwards.[74] The Thracians then had to face more balanced armies. These had sufficient light troops to protect their flanks and keep Thracian javelin fire from worrying their heavy cavalry and infantry. Macedonian heavy cavalry operated against them with impunity when Sitalkes invaded Macedonia.

> The Macedonians … made cavalry attacks on the Thracian army when they saw their opportunity. Whenever they did so, being excellent horsemen and armed with breastplates, no one could stand up to them[75]

This happened again during the Battle of Lyginus between Alexander and the Triballi.[76]

Against Theban and Persian cavalry, they enjoyed more success. Using skirmishing tactics, some Dii beat off Theban cavalry after the sack of Mycalessos (though not without loss).[77] At the Battle of Cunaxa, the largely Thracian peltasts fought with some distinction, skilfully allowing charging Persian cavalry to pass through their opened ranks while showering them with javelins. The Persians opted to ride on to the enemy

camp rather than again face the peltasts.[78]

The encounter between Xenophon's 10,000 and a combined Bithynian–Persian army in 401 is another good example of the strengths and weaknesses of Thracian armies.[79] In this battle, the Greek peltasts were placed on the flanks of the phalanx, but charged ahead of the main body. They were met by Persian cavalry and the Bithynians, and driven back. However, when the hoplites came up, sang the *paean*, and raised a shout as they brought their spears down for the attack, the Bithynians and Persians ran away.

The way the light cavalry fought is described by Livy who says the normal type of fighting for Macedonian cavalry was that they 'would advance and retreat alternately, discharging their weapons and then retiring.'[80]

It seems to have been a Thracian custom to march to battle drunk. Pausanias attributes this custom to the murder of Orpheus by drunken Thracian women.[81] He does not explain how women getting drunk should lead to men going into battle drunk, but there's no doubt the Thracians liked to drink lots of strong wine, and several authors mention the practice. For instance, Polyaenus says:

> Clearchus ... encamped near the mountains of Thrace. When the Thracians gathered, he knew that, drunk and rushing from the mountains, they would attack at night.[82]

Night attacks were a favourite Thracian tactic. The Brygi night attack on the Persians was so successful that (in combination with the loss of the Persian fleet) it induced the Persians to retreat.[83] Polyaenus mentions many stratagems employed by generals such as Iphicrates and Clearchus to defeat Thracian night attacks.[84] One of these reveals the Thracian practice of banging their weapons together (presumably to frighten the enemy) even when engaged in a night attack.[85] Xenophon also says that Seuthes regarded night marches as commonplace. However, he also relates that even a small force of Thracians that marched at night would often become disorganized – the cavalry would get separated from the infantry.[86] It may be that their success led to the adoption of this tactic by the Greeks, and the disastrous (but almost successful) night attack on Syracuse by Demosthenes.[87] Night attacks were rarely tried by ancient armies due to the problems of commanding and controlling a force without proper lighting or communications. At least one Thracian tribe found some solutions to these problems, though, as Xenophon says the Thyni were the most dangerous of

all the tribes, especially at night fighting.

An unusual tactic was the use of wagons as a defensive obstacle or as a terror weapon. Arrian describes[88] how 'a large force of natives under arms and the free Thracians' defended a mountain pass against Alexander. 'They had collected large numbers of carts, which they intended to use, if they were hard-pressed, as a sort of defensive palisade, with the further idea of sending them crashing down upon the Macedonian phalanx as the men were climbing the steepest part of the slope.' The wagons were loaded with rocks to make them more effective.[89] However, when the carts were rolled down the hill, they had little effect, as Alexander's troops either dodged them or hid under their shields as they roll over. M. Lucullus (governor of Thrace and Macedonia) was attacked by the Bessi using a similar device, consisting of wheels fastened together by their axles and studded with short spear-points, which was hurled down upon the Romans as they advanced up a steep slope.[90] The Dacians used comparable devices, though in a more developed form.[91] The Roman client-king of Thrace, King Rhoemetalces, accustomed the Thracians to the use of Roman weapons, military standards, and discipline.[92] Assuming that his infantry were trained as Roman-style auxiliaries rather than legionaries, they may have practised a more disciplined version of the same basic tactics. Only a proportion would have received such training – the rest would have remained untamed savages. An account of Thracian auxiliaries destroying a Gallic force on a mountain top shows that they retained their effectiveness while in Roman service.[93]

Chapter 9

Thracian Tribes

Some of the many Thracian Tribes and Clans

Some of the more noteworthy Thracian tribes are the Agrianians, Apsinthii, Asti, Bessi, Bisaltai, Bistoni, Bithyni, Brygi, Caeni, Ciconi, Dentheletai, Dersae, Dii, Dolonci, Edoni, Getai, Krobyzi, Maidi, Moesi, Odomanti, Odrysai, Paeonians, Sapae, Satrai, Serdi, Scordisci, Thyni, Thrausi, Trallians, and Triballi.[1] Here I will provide some information on a few not mentioned elsewhere in this book. One common theme for them is that they are called warlike, fierce, and many contend for the title of the best Thracian warriors. More information on tribes not mentioned and the full text of the references can be found on my web site.

Bessi

The Bessi must have impressed the Romans, as they took to calling all Thracians Bessi. They wrote it down as the tribe of origin for all auxiliaries from Thrace.[2] The 'huge Bessi' lived in the mountains north-east of today's Thessaloniki.[3] Herodotus says that the Satrai (of which the Bessi were a clan), were amongst the best warriors of their day, and remained free of any overlords.[4] Strabo is more humorous but less complimentary. He recalls that the Bessi 'are called brigands even by the brigands, live in huts and lead a wretched life.'[5] In 15 or 13BC there was an uprising of the Bessi in Thrace, led by the priest in the sanctuary of Dionysus, Vologaesus. They killed the Thracian king, but the end result was that the border of the Roman Empire was moved to the Upper Danube.[6] This did not stop them from trying again in 11BC, when L. Calpurnius Piso was called from Pamphylia in Asia Minor to squash another Bessi rebellion.[7] After this

revolt had been crushed, the Thracians 'showed their mad rage even in captivity; for they punished their own savagery by trying to bite through their fetters.'[8] In AD26 Poppaeus Sabinus put down a revolt of southern mountain Thracians (probably Bessi) with the help of the Thracian king Rhoemetalces II. The Thracians retreated to a mountain fortress where the braver spirits 'capered and chanted in front of their lines according to their national custom'[9] but despite a brave defence could not dislodge their besiegers, and some committed suicide rather than be taken prisoner.[10]

Other References for the Bessi
Polybius XXIII, 8
Strabo, *Geography* VII f47

The Bisaltai
Livy says the Bisaltai 'live beyond the Nessus, in the neighbourhood of the Strymon.' Strabo is more precise: 'Above Amphipolis, however, and as far as the city Heraclea, Heraclea Sintica [now Zervokhori] is the country of the Bisaltai, with its fruitful valley; this valley is divided into two parts by the Strymon, … If one goes up the Strymon, one comes to Berge [now Tachyno]; it, too, is situated in the country of the Bisaltai, and is a village about two hundred *stadia* from Amphipolis.'[11] Herodotus says that the country west of the Strymon is called Bisaltia.[12]

The Bisaltai were warriors with a long-standing reputation for fierceness and independence. Herodotus relates how the king of the Crestonians and Bistaltai refused to submit to Xerxes.[13] Instead, he fled to the Rhodope mountains. His six sons chose to join Xerxes' army, so he gouged out their eyes when they returned home. They are also known as a source of Macedonian mercenaries, a Macedonian refuge, or as a place for Athenian colonization.[14] They later came under heavy Macedonian influence, Diodorus saying that their five cities near Amphipolis were inhabited by bilingual people.[15] Right up to the Roman conquest, they retained their martial qualities, as Livy calls them 'first class fighting men' when describing the Roman partition of Macedonia.[16] Livy also calls them Perseus' last remaining hope in maintaining his struggle against the Romans (168BC).[17]

Other references for the Bisaltai
Pseudo-Apollodorus *Library* e.6.16

Bithynia and the Bithynians

Chronology

c.1500BC: Thracians move to Bithynia, participate in Trojan War
c.575BC: conquered by Croesus, integrated into Lydian empire
c.546BC: becomes part of Persian Empire
c.294BC: Ziboetes recognized as king
C.279-255BC: Nicomedes I
c.255–228: Ziaelas
228–185: Prusias I
185–149: Prusias II
149–128: Nicomedes II Epiphanes
128–94: Nicomedes III Euergetes
94–74: Nicomedes IV
75: Becomes a Roman Province.

Introduction

The Bithynians were a Thracian people of northwest Asia Minor, a sparsely populated land with many fertile valleys, forests, mountains, and coastal districts of great fertility. Their kings were practically independent of Persia from about 435BC – they kept their independence throughout the Hellenistic period, becoming steadily more Hellenized. After being ruled by forty-nine kings the country was bequeathed to the Romans, becoming a Roman province in AD75. It had several major cities on the fertile shores of the Propontis (which is now known as Sea of Marmara): Nicomedia, Chalcedon, Cius and Apamea. Bithynia also contained Nicaea, most famous to Christians for being the birthplace of the Nicene Creed.

According to Strabo Bithynia was bounded on the east by the River Sangarius (modern Sakarya River), but the more commonly received division extended it to the Parthenius, which separated it from Paphlagonia, thus comprising the district inhabited by the Mariandyni. On the west and southwest it was separated from Mysia by the River Rhyndacus; and on the south it adjoined Phrygia, Epictetus and Galatia. The most important mountain range is the (so-called) 'Mysian' Olympus (2,300m or 7,600ft), which towers above modern Bursa and is clearly visible as far away as Istanbul – 113km (70mi). Its summits are covered with snow for a great part of the year.

East of this the range extends for more than 160km (100mi), from the Sakarya to Paphlagonia. Both of these ranges are part of the mountainous border of the great tableland of Anatolia. The broad tract which projects

towards the west as far as the shores of the Bosporus, though hilly and covered with forests – the Turkish Agaf Denizi, or 'The Ocean of Trees' – is not traversed by any mountain chain. The west coast is indented by two deep inlets, the northernmost, the Gulf of İzmit (ancient Gulf of Astacus), penetrating between 65km and 80km (40–50mi) into the interior as far as İzmit (ancient Nicomedia), separated by an isthmus of only about 40km (25mi) from the Black Sea; and the Gulf of Mudanya or Gemlik (Gulf of Cius), about 40km (25mi) long. At its extremity is situated the small town of Gemlik (ancient Cius) at the mouth of a valley, communicating with Lake İznik, on which was situated Nicaea.

The principal rivers are the Sakarya which traverses the province from south to north; the Rhyndacus, which separated it from Mysia; and the Billaeus (Filiyas), which rises in the Aladağ, about 80km (50mi) from the sea, and after flowing by modern Bolu (ancient Bithynion-Claudiopolis) falls into the Euxine, close to the ruins of the ancient Tium, about 64km (40mi) north-east of Heraclea Pontica (the modern Karadeniz Ereğli), having a course of more than 160km (100mi). The Parthenius (modern Bartin), the eastern boundary of the province, is a much less considerable stream.

The valleys towards the Black Sea abound in fruit trees of all kinds, such as oranges, while the valley of the Sangarius and the plains near Bursa and Iznik (Nicaea) are fertile and well cultivated. Extensive plantations of mulberry trees supply the silk for which Bursa has long been celebrated and which is manufactured there on a large scale.

The most important cities were Nicomedia and Nicaea. During the Roman period the two had a long rivalry with one another over which city held the rank of capital of the province of Bithynia. Nicomedia was situated on a major cross-road on the route from Pontus and Armenia leading to the main crossing point to Byzantium. As the Roman capital, it was described as comparable in greatness to Rome, Alexandria, and Antioch. Nicaea, at the end of Lake Ascania, was noted for the fertility of its surrounding plain and its silk production.[18] In the seventh to sixth centuries BC the Greeks had established on the coast the colonies of Cius (modern Gemlik); Chalcedon (modern Kadiköy), at the entrance of the Bosporus, nearly opposite Byzantium (modern Istanbul; and Heraclea Pontica (modern Karadeniz Eregli, founded about 560BC), on the Euxine, about 120mi (190km) east of the Bosporus. All these rose to be flourishing places of trade, as did Prusa.

History

There are several legends about the origin of the Bithynians, but all of them

agree that the Bithynians were Thracians who had travelled to Bithynia from Europe. Appian says that they travelled there after their leader Rhesos was killed during the Trojan War.[19] He says that the Bithynians got their name either from the river Bithya, or that their first ruler's name was Bithys, son of Zeus and Thrace.[20] Herodotus says they were driven from the Strymon Valley by the Mysians and Teucrians, invading tribesmen from the north, and wandered eastwards until they settled in Bithynia. The existence of a tribe called Thyni in Thrace is well attested, and the two similarly named tribes of the Thyni and Bithyni appear to have settled simultaneously in the adjoining parts of Asia, where they expelled or subdued the Mysians, Caucones and other minor tribes, the Mariandyni maintaining themselves in the northeast. Herodotus mentions that Thyni and Bithyni existed side by side; but ultimately the latter must have become the more important, as they gave their name to the country. Thynia (Thynias) still remained a region adjacent to Bithynia, being the coast on the other side of the Bosporus near Apollonia and Salmydessus.[21] They were incorporated by King Croesus (595–546BC) within the Lydian monarchy, with which they fell under the dominion of Persia (546BC), and were included in the satrapy of Hellespontine Phrygia, which comprised all the countries up to the Hellespont and Bosporus.[22]

They first come to our attention in written history as one of the nations in the Persian army, armed and dressed in the same way as the other Thracians.[23] Bevan says they 'shared the same characteristics as their European cousins, savage hardihood, wild abandonment to the frenzy of religion and war.[24] The terror of them kept the Greeks from making any settlement along their coast, from Chalcedon to Heraclea, and woe betide the mariner driven to land there!'[25]

It was perhaps these characteristics that enabled the Bithynians to remain more-or-less independent until AD75. The Persians finished their conquest in 513BC with the submission of Chalcedon.[26] The Bithynian Thracians had to contribute a supposedly 60,000 (more probably 6,000) strong contingent to Xerxes' invasion of Greece in 480.[27] However, Bevan says that the Persian subjection of Asia Minor was very incomplete: the arm of the central government never reached far from the high roads.[28] Duncan Head says they were practically independent of Persia from 435BC.[29] The Bithynians were always causing trouble to their satrap. Pharnabazos allied with them against a common foe (the Ten Thousand) in 400BC, but was glad enough to see the Greeks wintering in their territory two years later, 'as the Bithynians were constantly making war against him.'[30] During the Peloponnesian War they caused similar problems for

Greeks who visited their country. One such was Alcibiades, who fearing a Spartan attack, fled there from his fortress in Thrace, only to be plundered of most of his wealth by the Thracians of Bithynia.[31]

During the latter part of the fifth century, a chief called Doedalsus began the unification of the Bithynians. He became the founder of the Bithynian dynasty. Doedalsus was succeeded by Boteiras, who lived for seventy-six years. His son, Bas, defeated a well-equipped force that had been marched into Bithynia by Calas, Alexander's satrap of Hellespontine Phrygia. Calas was killed in the battle.[32] Alexander hadn't marched through Bithynia, and subjection of the area was left to his commanders. This they failed to do. Bas lived for seventy-one years, and was king for fifty of them.[33]

Ziboetes, son of Bas, 'an excellent warrior', besieged Astacus and Chalcedon in 315BC. Polemaeus, Antigonos' general stopped him, but was obliged to make some bargain with Ziboetes, which was embodied in an alliance.[34] Ziboetes would later found the city of Ziboetium, under Mount Lypedrum. Though the location of this city is uncertain, it is a sign of increasing Hellenization.

Between the Battles of Ipsus (301BC) and Corupedion (281BC), Bithynia was allocated to Lysimachus. He sent two armies in succession against Ziboetes, who defeated both, killing one of the generals and driving the other far out of his kingdom.[35] Then Lysimachus marched in person, only to be defeated again. Heraclea was an ally of both Lysimachus and Seleukos so Ziboetes attacked Heraclea's territory and laid it waste. The Heracleans defended themselves, and Ziboetes' soldiers suffered almost as much harm as they inflicted.[36] Lysimachus was prevented by his death at Corupedion from making any further attempts to subjugate Bithynia. In 297BC, Ziboetes declared himself king.

After Corupedion, the principality was ostensibly part of Seleukos' domain. However, Seleukos was more concerned with conquering Thrace, and hadn't taken any significant action against Bithynia when he was assassinated seven months later. Seleukos' successor, Antiochos I, sent a force under Hermogenes against Heraclea and the Bithynians. As Bevan says 'the sight of Macedonian armies fleeing down the valleys before the tribesmen was almost familiar in Bithynia.'[37] Hermogenes marched through Phrygia to Bithynia but was ambushed by the Bithynians, and was killed together with his whole army, despite his own brave efforts.[38]

Shortly after (279BC), Ziboetes died. Ziboetes lived for seventy-six years and ruled the kingdom for forty-eight years; he was survived by four children.[39] He left his realm to his eldest son, Nicomedes I (*c.*279–255BC).

As a result of Ziboetes' success, Antiochos decided to mount an expedition against the Bithynians, so Nicomedes sent envoys to Heraclea to ask for an alliance, which he quickly obtained, promising in return to help the city when it was in a similar plight.

Nicomedes 'acted not like a brother but like an executioner to his brothers,' but one, called Ziboetes, survived. He took control of northwest Bithynia. Nicomedes ceded his brother's domain to Heraclea, and allied himself with Antigonos Gonatas (King of Macedon) and Heraclea against Antiochos. Nicomedes gathered together forces from various places, and the Heracleans sent thirteen triremes to help him. Then Nicomedes went out against Antiochos' fleet. For a while they remained confronting each other, but neither side started a battle, and they returned without achieving anything.[40] Nicomedes was left to concentrate on his brother.

Ziboetes was defeated in the battle that followed, but continued to rule part of the country.

At this point (277BC) the Gauls appeared on the European shore of the Hellespont, eager to cross over to Asia. Nicomedes made a treaty with them, in which he armed them and they were placed under his orders. Nicomedes I became infamous for bringing the scourge of the Galatians into Asia. He started by conquering the land of Bithynia controlled by Ziboetes and slaughtering the inhabitants, with the assistance of the Heracleans.[41] Ziboetes probably died soon afterwards. The Gauls were very effective in expanding his territory, and Nicomedes was able to use them to help him break Bithynia out of its hitherto land-locked state to the eastern coast of the Propontis. However, he wasn't able to retain control of the Galatians, and they were soon roaming around Phrygia, plundering and destroying. This had the fortunate effect of keeping Antiochos and his successors busy. No other attempt at conquest of Bithynia was made by the Seleukid overlord. Nicomedes would later find himself fighting the Galatians in the service of his son Ziaelas, who tried to return to Bithynia by force with their help.[42]

Under Nicomedes, the kingdom became Hellenized and enjoyed great prosperity. It began to have its own coinage. In 264, Nicomedia (modern İzmit) was founded as a Greek city on the opposite shore from the former site of Astacus, a city demolished by Lysimachus. The former Astacan citizens were settled there. In addition, Nicomedes and his son Ziaelas let it be known that Greek settlers, seamen, and merchants were welcome there and would be protected. It was still a major city during the Byzantine era. Nicomedia achieved a reputation as a city of great luxury and vice, so much so that one of the aspersions cast on the character of Julius Caesar

was that as a young man he spent several months there (as Nicomedes' lover).

Tzetzes says that Arrian

> tells the story that Nicomedes had a huge Molossian hound, who was very faithful to him. Once when Queen Ditizele of Phrygia, the wife of Nicomedes and mother of Prusias, was playing with the king, the dog thought she was attacking him. He bit her and tore apart her right shoulder, crushing the flesh and bones with his teeth. She died in the king's arms, and was buried magnificently in Nicomedia, in a gilded tomb made of stone … Many people say that the dog went out of sight of the king and ended its life, out of love of the king and grief for his wife.[43]

About 250BC, Nicomedes died. His wife, Etazeta, continued to rule on behalf of their infant sons. Ziaelas (*c*.255–228 or 235BC), a grown-up son by an earlier wife, Ditizele, had been disinherited and previously fled to Armenia.[44] Assisted by the King of Armenia, Ziaelas returned, at the head of some Galatians. Although Etazeta was supported by neighbouring cities and Antigonos, Ziaelas conquered first part, then all of Bithynia. Etazeta and her sons, including another Ziboetes, fled to Antigonos' court in Macedonia. Around 228 or 235BC, Ziaelas was murdered by some of his Galatians, leaving his son Prusias I on the throne.

Tzetzes calls Prusias 'single-toothed Prusias' and says he had a single bone instead of all his teeth. Like his father, Prusias I (228–185BC)[45] was mainly concerned with playing off rival claimants for the Seleukid diadem against each other and against the rising power of Pergamon. Only by allying with one or another could he hope to survive. To the east, he also had to contend with Pontus. All the same he laboured to extend and strengthen his kingdom. He seems to have been a man of intelligence and sensibility. Pergamon was Bithynia's main contender for power in the region, and the two states were often at war. In 216, some Gauls who had been brought over from Europe by Attalus of Pergamon began terrorizing the area around Abydos. Prusias led an army against them, and destroyed all the men in a pitched battle.[46] Attalus had been fighting Achaeus, a claimant to the Seleukid throne. In 219 Prusias allied with Achaeus and Rhodes to stop Byzantium from levying tolls on passing ships. He hired the local Thracians to keep the Byzantines inside the city. Byzantium countered by encouraging Ziboetes to come out of exile in Macedon and take his rightful inheritance. Ziboetes died on the way, though, and

Byzantium was compelled to make peace.[47] This peace, concluded in a hurry for fear of Ziboetes, required Prusias to give up his conquests in Mysia. He regained the area later, though.

For the First and Second Macedonian Wars, Prusias was the 'friend and ally' of Philip V of Macedon. He sent ships to help Philip in the first war, to frustrate the efforts of Rome and particularly Pergamon at sea. In the second war he was rewarded, as Philip sent Prusias help in the destruction of Chios in 197.[48] Philip also gave him Myrleia in the Propontis, but he sacked both cities and sold their citizens into slavery before handing them over. Prusias was able to expand his realm by taking all the Greek cities along the Propontis west to the Rhyndacus River, and east to Heraclea, where only a broken leg robbed him of victory. Five years later, Bithynia was aligned with Antiochos III in his war against Rome and Pergamon. However, after Antiochos was thrown out of Greece, the Romans persuaded Prusias to switch sides. The Battle of Magnesia (190BC) made all the nations in the region Roman client states, but their bickering continued. At the peace of Apamea (110BC), Eumenes (of Pergamon) complained that Bithynia had taken Mysia from him, and Prusias was forced to give it up. However, he was allowed to keep the rest of his realm.[49]

Bithynia was now a rich and prosperous country, with an area of about 47,000km^2 (18,000 square miles). It had plentiful fertile land for agriculture, forests for timber and pitch (for shipping), and the rich tunny fishing of the Black Sea. Prusias founded his own capital city of Prusa on the site of the modern city of Bursa, but only the foundations of his citadel on a hill above the city remain. It was said that Hannibal selected the site. In 186, he abrogated the peace, took Hannibal into his employ, and attacked Eumenes. Hannibal won a decisive naval victory, but Prusias lost all his land battles in the three year war. Titus Flaminius was sent to Bithynia to end the war, and Hannibal committed suicide while under house arrest. It is suggested that since Prusias I was an honourable and courageous man, he would have helped Hannibal to escape, and therefore it was Prusias II who was responsible for Hannibal's death.[50]

Shortly after, Bithynia was allied with Pergamon and Ariathres of Cappadocia against Pharnaces of Pontus and Mithridates of Armenia. The latter two were defeated in 179, but by then Prusias had died, and been succeeded by his son, Prusias II 'the Hunter.' Appian said of him 'Of the forty-nine kings who successively ruled the country before the Romans, the one most worthy of my mention, in writing Roman history, is Prusias, surnamed the Hunter.…'[51]

Prusias II was married to Perseus' sister Apama. However, during the Third Macedonian War (171–168BC), the only help he gave his brother-in-law was to send a delegation to Rome to ask for peace. This delegation said that Prusias had supported Rome in the war, which is probably true, because he was well received when he visited Rome after the war. Despite being 'supported by the goodwill of all those who had held commands in Macedonia,' his request for an extension to his territory was refused.[52] Polybius and Appian say that Prusias disgraced himself before the Senate by dressing as a freedman and abasing himself before the senators. He presented his congratulations to the senate on their victory over Perseus, addressing them as 'a freedman of Rome.' Polybius says he was a poor creature, alien alike to war and the arts. The senate granted all his other requests, though, one of which had been to leave his son, Nicomedes, behind.

Evidently Prusias maintained strong contacts with the Thracians on the other side of the Bosporus. Sometime between 165 and 160BC Prusias married a Caenian princess – the Caenians being a Thracian tribe that lived between the Bosporus and Mesembria (modern Nesebur). They had a son, Mostis, who deposed his uncle and took control of the southern Black Sea coast of Thrace. Judging by the size, quality, and quantity of his coins, Mostis became a rich and powerful monarch. Mostis' reign lasted until around 86BC, when Sulla marched through the area.[53]

In 154, Prusias attacked, and laid siege to, Pergamon. With the aid of the Galatians he ravaged the countryside and destroyed the temples. Rome ordered him to stop, and he was forced to shortly after by an alliance of Cappadocia, Pontus, Rhodes, and Cyzicus. The peace treaty cost him 600 talents, twenty decked ships, and whatever goodwill he still had with the Romans. His people didn't like him much, either – Appian says he was a wicked and cruel monarch.[54] Despite this, he tried to show his philhellenism by sending gifts to the temple of Apollo at Didyma and other acts designed to show him as a warm friend of Greek culture. A column raised in his name can still be seen at Delphi. The Aetolians erected a statue at Delphi in gratitude for the help he had given them in the war against Antiochos.

Nicomedes, Prusias' eldest son, though, was popular with both Romans and Bithynians. He was now in his forties and getting impatient for his turn on the throne. He had accompanied his father to Rome in 167BC. He was brought up under the care of the Senate and acted as his father's representative. His father, favouring a younger sibling for succession,

decided to assassinate him. But Nicomedes discovered the plot, and, in 148, he made his bid for the Bithynian throne, with the support of Attalus of Pergamon and Roman connivance. Attalus supplied the troops and accompanied the expedition. When Nicomedes arrived, the army and the people revolted. Prusias, trusting no-one, obtained a bodyguard of 500 European Thracians from his (notoriously savage) son-in-law, Diegylis the Thracian, and holed up in the citadel of Nicaea, awaiting Roman deliverance. When this didn't come, he sought sanctuary at the temple of Zeus in Nicomedia. The inhabitants opened the gates, and Prusias was stabbed to death at the altar by some of Nicomedes' emissaries. Nicomedes was now Nicomedes II Epiphanes ('the god manifest') and reigned 149–128BC).[55]

In 138 Attalus III died, bequeathing his territory to Rome. This probably made Bithynia's usual pastime of a war with Pergamon obsolete. Nothing much happened to Nicomedes II. His reign proved to be peaceful and prosperous. He came to enjoy a good reputation among his subjects and with the Romans, whom he was always ready to serve. For instance, he assisted Rome in the war with Attalus, king of Pergamon in 131BC. He then helped quell the revolt of the Pergamene pretender Aristonicus. He was honoured by the Ionian Federation, and the city of Priene – in gratitude for his aid – founded a cult for his worship, complete with priest and sacrifice. He loved art, or at least the reputation of an art lover. Nicomedes died in 128BC, leaving a country that was now no more than a Roman client kingdom.

Nicomedes III Euergetes (128–94BC) was very wealthy. In addition to the profits gained from his country, he was a large-scale moneylender. He offered to cancel a loan to the city of Cnidus in exchange for a famous statue of Aphrodite by Praxiteles, but he was declined. He was able to pay off a concubine to the tune of 500 talents, a fabulous figure that Rome had previously charged Bithynia for war reparations but given twenty years to pay because it was so much money. The concubine was the mother of his younger son, Socrates.

During his reign, Bithynia became troubled by the slave trade, which had expanded greatly due to the activities of the Roman *publicani* (tax farmers) and the defeat of Aristonicus. When Marius asked him for assistance against the Gauls, he answered that he couldn't help, 'since the majority of his subjects had been carried off by the *publicani* and sold into slavery.' In fact, it was probably slave raiding by Bithynia's enemies Galatia and Pontus, with the blessing of the Roman governor of Asia, which brought about this state.[56] Late in his reign he formed an alliance

with Mithridates of Pontus, and divided Galatia and Paphlagonia between them. Nicomedes installed a puppet king in Paphlagonia. Then (probably in 103BC[57]) Nicomedes made a sudden attack on Cappadocia and expelled the king, who had been installed by Mithridates. The previous king of Cappadocia had been married to Mithridates' sister Laodice, but he tried to assert his independence, and Mithridates had him assassinated. Laodice was so upset by this that she welcomed the Bithynian invasion and married Nicomedes. The exiled king Ariarathres was Mithridates' nephew, and Mithridates soon restored him to his position.[58] Undeterred, Nicomedes found another Ariarathres and declared him king and, for a while (i.e. until Mithridates' generals caught up with him), issued coins as though he was the sole ruler of Cappadocia. Both Pontus and Bithynia sent embassies to Rome explaining why their king, and not the other one, was king. They shouldn't have bothered – the Romans told Nicomedes and Mithridates to get out of Cappadocia and, for good measure, Paphlagonia too. Meanwhile, in 94BC, Nicomedes died.

Nicomedes' son, Nicomedes IV Philopater ('loving father', reigned 94–74BC) was reputed to be self-indulgent and vicious. He was married to a niece of Mithridates, a Cappadocian daughter of the same Laodice who had been his stepmother. At the time of his succession, Sulla was engaged in throwing Mithridates' Armenian allies out of Cappadocia. Nicomedes may have lent troops to Sulla to speed Mithridates on his way. According to charges later made by Nicomedes, Mithridates responded by sending an assassin to kill Nicomedes, but the assassination attempt failed.

Soon after his accession, and probably at the instigation of Mithridates, his bastard brother, Socrates Chrestus (the Good), appeared before the Senate saying he should be king. During the last years of Nicomedes III's rule he had become so indispensable that he had been virtually co-monarch.[59] The Senate rejected him and reaffirmed Nicomedes. Socrates went to Pontus and, in AD 90, was able to throw out Nicomedes from Bithynia with an army provided by Mithridates VI Eupator. The Romans ordered Mithridates to put Nicomedes back, and told Nicomedes to attack Pontus. Mithridates assassinated Socrates so that Nicomedes became king without loss of any Pontic territories. Nicomedes was deeply in debt to the Romans, so late in 90BC the Bithynians invaded Pontic territory, plundering coastal Paphlagonia as far as Amisus. Mithridates complained to the Romans and, when they did nothing, reoccupied Cappadocia. The following year an army of Romans, Phrygians, and Galatians enforced the decree. The Roman army was led by Manius Aquilius. This led to the 1st Mithridatic War (88-85BC), when Bithynia was allied to Rome,

Cappadocia, Paphlagonia, and Galatia, a coalition that mustered 120,000 men between them. Mithridates supposedly had between 150,000 and 250,000 men.[60]

According to Appian, in 88BC Nicomedes had 50,000 foot and 6,000 horse under his command.[61] This force met a smaller number of Mithridates' troops by the River Amnias and was beaten (see the section on the Bithynian army below). Nicomedes fled to the camp of the Roman general Manius, near Mount Scoroba, on the border between Bithynia and Pontus. Here 100 Sarmatian horse of the Pontic advance guard defeated 800 Nicomedean cavalry and took some of them prisoners. Nicomedes then went to join Cassius, who was guarding the border of Bithynia and Galatia. Meanwhile, Manius' 40,000 infantry and 4,000 cavalry, demoralized by these defeats, retreated to Protopachium. Mithridates routed this army, too. Nicomedes and the Romans tried to raise and train a new army in Phrygia. This turned out to be useless, and Nicomedes retreated to Pergamon and then fled to Italy. He wasn't able to return to Bithynia until 85BC, when Sulla made peace with Mithridates. Nicomedes was now no more than a cringing vassal of Rome.

The Second Mithridatic War (85–81BC) was mainly fought in Cappadocia and Pontus. Nicomedes became a good friend of Julius Caesar (his enemies said more than just a friend), and lent him some ships to help deal with a revolt of Mitylene. Nicomedes IV died childless in 74BC, bequeathing his country to Rome.

The Bithynian Army

The Bithynian army started as a Thracian army, with only a few differences from the European version. It probably changed (though never completely), after repeated invasions, to a Hellenistic army. As allies (and enemies!), it had Galatians, Thracians, Greeks, Persians, Romans, Macedonians, Paphlagonians, Pergamese, Pontics, and Cappadocians.

The major differences between the Bithynian and Thracian armies were that the Bithynian army would lack bow-armed light cavalry, slingers, and *rhomphaias*. It might include Persian cavalry, as noted above: Pharnabazos provided Persian cavalry for Bithynian operations against the Ten Thousand. There are only two references to Thracians using slings, and none regarding the Bithynians. For these reasons it is likely that there would be only a few slingers in the army. There wouldn't be any bow-armed light cavalry because the Bithynians didn't use this troop-type, and the nearest supplies were too far away. The Thracians who used *rhomphaia*s seem mainly to have come from western and northern Thrace,

and it is unlikely that its use became popular among their Asian brethren. Griffith says that there is no evidence that there was a standing army of (European) Thracian mercenaries. Rather, he says that Thracians were recruited for a specific and immediate purpose. They were in the service of Prusias I in his war against Byzantium (219/18BC) and Prusias II sent for a bodyguard of 500 Thracians from a prince called Diegylis, his kinsman.[62] Cavalry are almost always mentioned as part of Bithynian armies. This isn't true of Thracian armies. This could mean that Bithynian armies had a higher proportion of cavalry than the Thracians. Coins of Prusias I had a bow and quiver on the obverse. The bow had long been a Thracian royal symbol, but used here as a national symbol it still may indicate the presence of a significant number of archers in his army. Heraclea similarly had a *gorytos* on the obverse of one of its coins – although the bow was a symbol of Heracles, the Greeks didn't use the *gorytos*, so it indicates some local influence in the choice of weapons.

Xenophon gives some good descriptions of the early Bithynian army in action around 400. These show how similar it was to the Thracian army, being composed of light cavalry and peltasts. In the *Anabasis* the Bithynians set upon some Arcadians who are returning from a successful plundering expedition, and kill them all.[63]

> After this success, the Thracians shouted round to each other and mustered their forces… At dawn all round the hill where the Greeks were camped there were drawn up great numbers of cavalry and peltasts, with more coming up all the time. In attacking the Greeks they were safe themselves, since, while the Greeks did not have even a single archer or javelin-thrower or horseman, they ran or rode forward to discharge their weapons, and, when the Greeks charged, easily fell back again, while others attacked from a different direction. Hence on the one side many were being wounded, on the other side not a man.[64]

The Greeks are saved only by the arrival of Xenophon, who tricks the Thracians into thinking there is going to be a night attack by setting fire to everything in sight, then putting all the fires out just before nightfall.

Later, 2,000 Greeks are attacked by Pharnabazos' cavalry while foraging: 'They had come to reinforce the Bithynians with the intention of joining with them and preventing the Greeks, if possible, from entering Phrygia. This cavalry force killed at least five hundred of the Greeks, and the rest fled into the mountains.'[65] The Bithynians waited until just before

sunset, when the Greeks had begun to prepare their meals, then using the cover given by the surrounding thick woods suddenly burst upon the outposts, killing some of them and pursuing the rest up to the camp.[66]

Xenophon picked up the survivors of this encounter, and next day advanced to battle.

> Suddenly they saw the enemy coming over some hills in front of them, numbers of cavalry and foot in battle formation. It was Spithridates and Rhathines who had come from Pharnabazos with a strong force.[67]

The Greeks formed their hoplites into two lines, the rear line having three companies, each of 200 men. The peltasts (including some Thracians) were placed on each flank. The Persians and Bithynians kept their position on the hills. Then the Greeks advanced at a steady pace, with spears kept at the slope.

> When the two armies were close together the Greek peltasts raised a shout and ran towards the enemy before anyone had given them the order. The enemy charged to meet them, both the cavalry and the Bithynians in close order, and they drove the peltasts back. But when the line of hoplites came up, moving at a quick pace, and at the same time the trumpet sounded and they sang the *paean* and then raised a shout as they brought their spears down for the attack, then the enemy stood their ground no longer, and took to flight … The Greeks saw that Pharnabazos' cavalry was still standing in formation, and the Bithynian cavalry were gathering together to join it, and looking down from a hill-top on what was happening. [The Greeks] were tired out, but all the same decided that they should attack the cavalry too with all the strength at their command, to prevent them getting back their breath and regaining confidence. So they formed up and advanced, and then the enemy cavalry fled down the hill just as though it was cavalry that was pursuing them.[68]

Two years later, in 398BC, Dercylidas was plundering Bithynia.[69] 'The Bithynians … got together all the cavalry and peltasts they could, and at dawn made an attack on the Greek hoplites, who were about 200 strong. When they got within range they hurled their spears and javelins at the Greeks, who, shut up inside the stockade which was only about the height of a man, found themselves unable to do anything, and were killed and wounded on all sides'.[70] The Greeks broke down their fortifications and charged out, but were unable to catch the Bithynians, and eventually all but

fifteen died.

The Hellenization of the Bithynian army probably began after Alexander's invasion. Although some transition to a Hellenistic army was probable, it is likely that the bulk of the army was provided by unreformed tribesmen, as in Thrace. G T Griffith and Duncan Head state that there is no evidence to say for certain whether or not the Hellenized kings tried to build up a professional Hellenistic army.[71] There is no trace of Greek mercenaries or military settlers/*katoikoi* the usual sources of manpower for such an army. Griffith says that the Bithynian standing armies must have consisted of soldiers drawn from their own subjects, after the old Persian system.[72] Rostovtzeff agrees, adding that the native army was reinforced by Galatian mercenaries.[73] Duncan Head says that the following grave inscription (referring to the Battle of Corupedion, 281BC) suggests a degree of regular organization in the third-century Bithynian army:

> A grave of full length encompasses my bones, and yet, O stranger, I quailed not before the brunt of the foemen, but being one who fought on foot I abode in the forefront of the horse when we strove in the Plain of Corus. And before that I died for great glory's sake, I had first smitten a Thracian armed and a man of the Mysians, wherefore let praise be given to the swift son of Bioeris, Menas the Bithynian, excellent among the captains.[74]

The inclusion of steadier troops than peltasts in the Bithynian army is shown at the battle by the River Amnias (88BC). Appian says that Nicomedes' troops 'fought a long time facing both ways. But after the greater part of his men had fallen, Nicomedes fled with the remainder into Paphlagonia, although the phalanx of Mithridates had not come into the engagement at all.' The latter comment could mean that Nicomedes' phalanx had been in the engagement, while Mithridates' hadn't. The Pontic army seems to have been able to literally run rings around the Bithynians, indicating that the Bithynian army was of a more ponderous nature - something to be expected of an army with a high proportion of heavy infantry/phalangites, not (Thracian) peltasts/*thureophoroi*.[75] Matyszak points out that the Pontic force must have had a superiority of light troops and cavalry, and depicts the Bithynian army to be like that of the last Macedonian armies – consisting mostly of a very large phalanx.[76] An army of Bithynian peltasts would be able to jump out of the way of the scythed chariots or indeed to destroy them with missiles, in the same way the peltasts avoided the Persian cavalry at Cunaxa and saw off the scythed

chariots at Gaugamela.

Still, there is no direct evidence for pikemen in the Bithynian army. If there were any at this battle, in which, as Appian stresses, Nicomedes Ill deployed his entire army, they fought very badly. They also didn't behave like pikemen – the later Macedonian armies usually collapsed almost immediately if forced to fight in two directions at once (e.g. as happened at Cynoscephalae). It can also be said that they weren't there because the Pontic general Archelaos deemed it unnecessary to await the arrival of the Pontic phalanx before engaging the Bithynians, and comprehensively defeated the considerably larger Bithynian army without them. However Nicomedes probably led an inexperienced army, while Archelaos led a veteran force that was used to manoeuvring against much more mobile opponents. His role was to busy the Bithynians long enough for the rest of the Pontic army to arrive, so he was going to engage them if they had pikemen or not. At any rate, the archaeological evidence indicates that there were some heavy infantry in the Bithynian army, equipped like hoplites.

Facing Nicomedes' army of supposedly 50,000 foot and 6,000 horse were a Pontic advanced guard of 10,000 cavalry from Armenia, commanded by Arcathias, and some scythed chariots and light infantry, commanded by Archelaos. A good portion of the Pontic light infantry must have been well-trained peltasts (possibly mercenary *thureophoroi*), since they were able to retire under pressure and then advance.

The Pontic force began the battle by sending forward a small force to seize a rocky hill in the plain, to avoid being surrounded by the much more numerous Bithynians. These men were driven off the hill, at which Neoptolemus advanced to their aid. Nicomedes countered with a similar move. 'Thereupon a severe and bloody struggle ensued. Nicomedes prevailed, and Mithridates' troops fled until Archelaos, coming across from the right flank, fell upon the pursuers, who were compelled to turn their attention to him.' The Bithynians' superior numbers apparently saved them, because they pushed Archelaos back:

> He yielded little by little in order that the forces of Neoptolemus might have a chance to rally. When he judged that they had done so sufficiently he advanced again. At the same time the scythed chariots were driven at great speed against the Bithynians, cutting some of them in two instantaneously, and tearing others to pieces. The army of Nicomedes was terrified at seeing the men cut in halves and still breathing, or mangled in fragments, or hanging on the scythes.

> Overcome rather by the hideousness of the spectacle than by loss of the fight, fear disordered their ranks. While they were thus thrown into confusion Archelaos attacked them in front, and Neoptolemus and Arcathias, who had turned about, assailed them in the rear. They fought a long time facing both ways …[77]

Nicomedes could see that the battle wasn't going his way, and fled. His army then broke also; the Pontic army captured his camp and his pay chest.[78]

The appearance of Bithynian infantry is indicated by a painted tombstone of Dionysios the Bithynian, from Alexandria, dating to the second century. Dionysios wears dark brown ankle-high boots, a wreath around his head, and a dark brown tunic with a vertical white stripe down the middle. Dionysios carries a six-foot fighting spear while his child-like page holds two shorter javelins and his yellow-brown *thureos* (a large oval shield).[79] In his detailed article on the later Bithynian army, Ruben Post says

> The infantry was made up of the more common *thureophoroi* fighting alongside their heavier companions-in-arms the peltasts and perhaps a body of heavily-armed hoplites as well. These core troops were supported by the light *promachoi* infantry and the skirmishing light cavalry as well as the crucial heavy cavalry.

Dii

The Dii lived in the Rhodope mountains. Thucydides declares that the Dii were the most warlike infantry in Sitalkes' army (429BC). The Dii make an interesting conundrum, as they clearly defeat Theban cavalry by using peltast hit-and-run tactics, and yet they are always referred to as swordsmen. They loved plunder just as much as other Thracians. As they lived in the same area it may be supposed that they were a clan of a larger, equally warlike mountain tribe such as the Bessi. Thucydides attributes to the Dii one of the worst atrocities of the Peloponnesian War - the massacre of every man, woman, child and dog in the Theban town of Mycalessos.[80] The unbridled ferocity of the Thracians was a shock to the Greeks, though they were led by an Athenian, Diitrephes.[81]

Thucydides states 'The most warlike troops among the infantry [in Sitalkes' army] were the independent swordsmen who came down from Mount Rhodope.'[82] Then he says '[Sitalkes] summoned many of the hill

Thracian independent swordsmen, called Dii and mostly inhabiting Mount Rhodope, some of whom came as mercenaries, others as volunteers.'[83]

Of their clash with the Thebans, we are told

> In this same summer there arrived 1,300 peltasts from the Dii, one of the Thracian tribes who are armed with short swords… in the rest of the retreat the Thracians made a very respectable defence against the Theban horse, by which they were first attacked, dashing out and closing their ranks according to the tactics of their country, and lost only a few men in that part of the affair. A good number who were after plunder were actually caught in the town and put to death. Altogether the Thracians had two hundred and fifty killed out of thirteen hundred, the Thebans and the rest who came to the rescue about twenty, troopers and heavy infantry.[84]

After this, the Dii are rarely mentioned, and are last heard of when they revolted against the Romans (with the Odrysai and Koilaletai) during AD21.[85]

Getai

The Getai lived between the Haemus range and the Skythians, on both sides of the *Istros* (Danube) River.[86] They were in constant contact with the Skythians, and Herodotus mentions a confrontation and royal marriage between Thracian and Skythian forces.[87] Arrian reports[88] that the northern Thracians (i.e. the Getai) had learnt the wedge-shaped battle formation from the Skythians. There were many similarities between the Getai and the Skythians, and authors such as Valerius Flaccus and Ovid confuse the Getai with the Skythians and Sarmatians. Ovid says 'Before me is a crowd of Skythians, a trousered throng of Getai.'[89] Thucydides asserts 'Both the Getai and these other tribes are neighbours of the Skythians and are armed in the same way, being all mounted archers.'[90] They moved with their herds in the region on a seasonal basis, especially when the Danube froze over in the winter.[91]

The Getai were particularly fearless. They resisted Darius stubbornly[92] and Herodotus says the Getai were 'the bravest and most noble of all the Thracians' and that they 'pretend to be immortal.'[93] He says that Zalmoxis taught the Thracians that none of them would die, but 'they would go to a place where they would live forever and have all good things.'[94] This caused them to welcome death, especially in battle.[95] Plato says that the

Thracian physicians of Zalmoxis 'are said even to make one immortal.'[96]

They were also tough and ferocious. When the Getai captured Lysimachus, they showed him what tough fellows they were by eating out of wooden bowls, while giving the soft Macedonians gold and silver to eat out of and draped couches to sit on. Diodorus said that the Getai were men 'who are barbarous and lead a bestial existence, live in a wintry land deficient in cultivated grains and fruit, normally sit on straw, eat from a wooden table, and drink from cups of horn or wood.'[97]Valerius Flaccus tells us a story that Pharaoh Sesostris waged war on the Getai, but was so terrified by the slaughter of his people he returned to Thebes and the Nile.[98] Though this story is obviously untrue (unless the Egyptians fought the Skythians during their invasion of Asia Minor), it still demonstrates a great respect for Getic ferocity.

Ovid, writing from Tomis, complained of the cold climate and the austere Getic lifestyle.[99] He said of the Getai:

> Among them there is not one who does not bear quiver and bow, and darts yellow with viper's gall … Equipped with these, the horseman circles the frightened walls as a wolf runs about the fenced sheep. The light bow once bent with its horse-hair string remains with its bonds ever unrelaxed. The roofs bristle with implanted arrows, as if shrouded in a veil, and the gate scarce repels attack with its sturdy bar … Harsh voices, grim faces, surest indication of their minds, neither hair nor beard trimmed by practised hand, right hands not slow to stab and wound with the knife which every barbarian wears fastened to his side.[100]

The Getai supplied the second largest contingent of cavalry to Sitalkes' army and mercenaries to other Odrysian monarchs. Sometime between 399 and 380BC the Athenians were at war with the southeast Thracian kingdom and raiding the coast of the Thracian Chersonese. Polyaenus says that Seuthes hired 2,000 Getic light troops and secretly ordered them to burn and destroy the region and to attack the defenders on the walls (presumably of Kardia), as if they were enemies of the Thracian king.[101] If this story is true it implies that it was not unusual to see Getic mercenaries so far from their home, or that they were indistinguishable from the local Thracians, or that the Athenians were unaware of any differences between the Getai and other Thracian tribes. The Athenians, who had long cast covetous eyes on Kardia, learnt about this unexpected assistance and sailed to the area. They disembarked from their ships with high expectations and approached the

walls. Seuthes came out from behind the walls to oppose the Athenians. That is interesting as it implies that there were Thracian troops garrisoning the city, and that Seuthes could command the support of the local Greek troops. The Getai acted as though they intended to deploy with the Athenians, and took up a position behind them. When Seuthes attacked, the Getai also attacked, surrounding the Athenians and killing all of them.[102]

Getic armies could be very large and contained an unusually high proportion of cavalry. They came out against Alexander with 10,000 infantry and 4,000 cavalry, but Alexander surprised and routed them.[103] Appian says that the Getai provided 10,000 foot and 10,000 cavalry as mercenaries to Perseus' army.[104]

In 62/1BC the Roman governor of Macedonia, G. Antonius Hybrida, marched into Thrace, but was defeated near the Danube River. In 61BC the Greek coastal cities, supported by the Getai and Bastarnae, revolted against the Romans and again defeated them near Histria.[105] About 56 to 54BC, the Getai organized a military and political alliance under Burebista, the first great Dacian king (*c.*70–44BC), that was powerful enough to worry Rome. In 53BC Burebista, seeking to expand his domain, moved south along the western Pontic coast as far as Apollonia Pontica.[106] In 29/8BC a Bastarnae/Dacian invasion south of the Danube was repelled by the proconsul of Macedonia, M. Licinius Crassus (grandson of the Crassus who defeated Spartacus). He conquered the Danube plain all the way to the Haemus Mountains.[107] Then in AD 15 the Roman province of Moesia was created.[108]

Mark Antony used a rumour that the Getai were raiding Macedonia to get control of an army of six legions, plus numerous auxiliaries stationed there. Antony told the senate that this army had been prepared by Caesar to be used first against the Getai, then against the Parthians. It was feared the Getai would make an incursion into Macedonia if the army were withdrawn.[109] Perhaps this explains their savage treatment of this people. In AD 11/12 the Romans displaced about 50,000 Getai to the right bank of the Danube *(Ripa Thraciae*). Because of this, a large number of Geto-Dacian towns in the Wallachian plain were uninhabited after the reign of Augustus.[110]

The Dacians were direct descendants of the Getai who spoke a language closely related to Thracian.[111] They also had similar religious beliefs to the Thracians. Incursions of Dacians and Sarmatians into Moesia occurred in AD 69 and 87. There followed almost continuous war with the Dacians until AD 106, when Decebalus (AD 87–106) committed suicide and his capital, Sarmizegetusa, fell to the Romans. Dacia then became a Roman province.[112]

The Moesi/Mysians

The Roman province of Moesia was created around AD 15. It incorporated present-day eastern Serbia, northern Bulgaria and southeastern Romania. It was named after the Moesi, who lived in eastern Thrace, in the plains bordering the sea and the Danube. They were Rome's strongest enemy in Thrace towards the end of the first century, and were renowned as brave warriors who fought hand-to-hand. The thirteenth book of the *Iliad* begins like this:

> Now Zeus, after that he had brought the Trojans and Hector to the ships, left them to their toil and endless labour there, but elsewhere again he turned his shining eyes, and looked upon the land of the Thracian horse breeders, and the Mysians, fierce fighters hand to hand, and the proud *Hippemolgoi* that drink mare's milk, and the Abioi, the most righteous of men. To Troy no more at all he turned his shining eyes…[113]

The Mysi may or may not have been the same as the Moesi, but Strabo says[114] that the Mysi lived on either side of the Ister, 'these also being Thracians and identical with the people we now call Moesi.' To prevent their opponents gaining purchase, they shaved the front of their heads.[115] Florus says 'it is a repulsive task to describe the savagery and cruelty of the Moesians and their barbarity surpassing that of all other barbarians.'[116] He also says that before one battle with Marcus Crassus (29BC), the Moesians sacrificed a horse in front of the army and made a vow that they would offer up and feed upon the vitals of the slaughtered leaders of their enemies.

Odomanti

In Aristophanes' *Acharnians*, the Odomanti are described as 'the nastiest tribe in Thrace' who had an army so big the Athenians would think they were 'a cloud of locusts.'[117] Herodotus says they avoided being conquered by the Persians, and suggests that they were a Paeonian tribe. They are mentioned in Thucydides as useful Athenian allies and mercenaries.[118] They worked some of the gold and silver mines of Mt Pangaeum, and lived near Amphipolis.[119]

Odrysai

The Odrysai was the most powerful Thracian tribe, the only one to briefly unite all the others. Most Thracian kings mentioned in ancient texts were Odrysian kings. They were based in the central Thracian plain, between the

modern towns of Kazanluk and Jambol. This is known from archaeological evidence and also because Xenophon says that the Odrysian king Medokos was a twelve-day journey inland from the sea.[120] The Odrysians were usually Athenian allies.[121]

In 429BC

> The empire of the Odrysians extended along the seaboard from Abdera to the mouth of the Danube in the Euxine … The tribute from all the barbarian districts and the Hellenic cities, taking what they brought in under Seuthes, the successor of Sitalkes, who raised it to its greatest height, amounted to about four hundred talents in gold and silver … It was thus a very powerful kingdom; in revenue and general prosperity surpassing all in Europe between the Ionian Gulf and the Euxine, and in numbers and military resources coming decidedly next to the Skythians, with whom indeed no people in Europe can bear comparison… so that the whole [of Sitalkes' army] is said to have formed a grand total of a 150,000. Most of this was infantry, though there was about a third cavalry, furnished principally by the Odrysians themselves and next to them by the Getai. The most warlike of the infantry were the independent swordsmen who came down from Rhodope; the rest of the mixed multitude that followed him being chiefly formidable by their numbers.[122]

Forces of mercenary Odrysians included

> a force of Odrysians, about two hundred horsemen and about three hundred peltasts, came … as allies from Seuthes across the strait[123]

and, in 168BC,

> three thousand free Thracians were under their own commander … Kotys, son of Seuthes, king of the tribe of the Odrysai, had arrived at Citium with one thousand picked cavalry and about an equal number of infantry.[124]

Other References for the Odrysai
Herodotus IV.92–6
Polybius XXIII.8 and XXVII.12
Strabo, *Geography* VII f47
Valerius Flaccus V.95–100

Xenophon, *Anabasis* VII.2.32; 4.21; 5.15
Xenophon, *Hellenica* III.2.2–5
Xenophon, *On the Art of Horsemanship* VIII.6
Polyaenus, *Stratagems* III.9.60

Paeonians

There is some argument about the ethnicity of the Paeonians – whether they were similar to, or different from, the Thracians, Illyrians, and Macedonians. N G L Hammond says they spoke a different language from the Thracians, Illyrians, or Greeks.[125] In any case, they must have been under great Thracian and Illyrian influence due to their location.[126] Thucydides says that the Agrianians were a Paeonian tribe, so they are included here. Herodotus relates the Agrianians, Doberes, Paeoplians, and Siropaeonians were Paeonian tribes who lived north of Mt Pangaeum.[127] Their territory was originally quite extensive, but shortly before 700, the Macedonians drove them out of Lower Macedonia.[128] They later moved north of Macedon. Strabo says that, on the south, Paeonia bordered on the countries of the Autariatae, the Dardanii, and the Ardiaei; and it extended as far as the Strymon.[129] About 510BC the Persians conquered them by falling upon their 'cities' by an inland route, while the Paeonian army stood guard over the coastal route. The eastern Paeonian tribes were then deported to Sardis, and possibly to Persia.[130] Many of these returned later, during the Ionian revolt. They provided troops for Xerxes' invasion of Greece when he passed through their country.[131] The Paeonians got their revenge by stealing Xerxes' sacred chariot and horses.

The Paeonian army was likely similar to the Thracian army, with a good number of light javelin-men, peltasts and cavalry. They probably also had archers, as in the *Iliad* 'Pyraechmes led the Paeonian archers from distant Amydon, by … the river Axios.' Herodotus says the Paeonians 'from the River Strymon' had marched to the outskirts of Perinthus and issued a challenge for a horse, a man, and a dog to fight.[132] Two of the Greek champions won but the Paeonians launched a surprise attack and nearly wiped out the Greek army in the battle that followed.

The Paeonians were apparently well known for the quality of their hunting dogs, which must have been rather big as they were used as shield-bearers in war and were great fighters. David Karunanithy says

> Pollux has added that like the battle animals of the Magnesians, the Paeonians used dogs 'of the same sort…these being great fighters'

(*Onomasticon* V.46–47). From analogy with their Macedonian neighbours it may be reasonable to suppose that Paeonian hounds were reared and owned by the king and aristocracy.[133]

Shortly before 429, Sitalkes campaigned against the Paeonians and built a road by felling the timber on the route over a mountain towards their territory. The campaign was successful, as the Paeonians contributed troops to Sitalkes' army[134] but, by the mid-fourth century, had formed a small kingdom of their own that minted its own coins. In 356/5 they plotted to attack Macedonia in concert with the Thracian and Illyrian kings but Philip II made a pre-emptive strike while they were still gathering their forces and forced them to join his army instead.[135] Nevertheless in 360/59 the Paeonians began to pillage Macedonia, part of a joint plan with the Illyrians and Thracians.[136] Philip got them to stop with bribes and promises.[137] From the reign of Philip, though retaining their own kings until 217BC, they were more or less directly incorporated into Macedon.[138] Paeonian cavalry fought for Alexander, and infantry for Perseus.[139] Curtius says that, at the Tigris River skirmish, the Paeonian cavalry were ordered to charge the Persian cavalry at full gallop and especially distinguished themselves.[140] Their commander, Ariston, ran through, unhorsed, and decapitated the Persian cavalry commander. At the beginning of Alexander's campaign, he had 900 Thracian and Paeonian scouts with Cassander in command, which probably means there were about 200 Paeonians.[141] They fought at Granicus, Issus, and Gaugamela, but thereafter are not mentioned, so they either went home or were merged with another unit.[142] They fought as light cavalry.

Other References for the Paeonians
Euripides, *Rhesos* 405

The Agrianians
Herodotus says that the Agrianians lived north of Mt Pangaeum and when the other Paeonian tribes were forcibly removed to Asia, the Agrianians stayed behind as the Persians couldn't get to them.[143] They sent troops to join Sitalkes' invasion of Macedonia.[144] Arrian said they were one of the four most warlike and robust peoples in Europe (the other three being the Thracians, Paeonians, and Illyrians).[145] The Agrianians were a Paeonian tribe not included in the Paeonian state, but with a king of their own. They provided light infantry to Macedon, but (unlike other Paeonian tribes) no cavalry are mentioned except by Curtius, who is most probably mistaken

(perhaps confusing them because they were acting in their *hamippoi* role).[146]

Their fame comes from their use by Alexander the Great as his special forces troops, his own SAS (Special Agriane Service?) regiment. They were probably supplied to Alexander by the client king of the Agrianians, Langarus, out of his household troops. King Langarus was offered Alexander's half-sister in marriage, and said he would fight the Illyrians for him, but died before either could occur.[147] Only one company (probably 500 strong) was present at the crossing of the Hellespont, but a second company joined the army before Issus, bringing their strength up to 1,000 (under the command of the Macedonian Attalus).[148] The Agrianians were still 1,000 strong during the invasion of India.[149] They were armed with javelins and a sword or knife, but probably also knew how to use a long spear or a bow if necessary. At the beginning of the Battle of the Hydaspes, the Agrianians are called 'spearmen' while others are described as 'javelin-men.' Later in the battle, they are using javelins as Curtius says they 'unleashed a thick barrage of missiles on both elephants and drivers.'[150]

They probably also carried a shield and wore a helmet, depending on the requirements of the mission. Given their elite status and their importance to Alexander's battle plans it is very that Alexander equipped them with better armour and weapons when it became possible. They were not mentioned in frontal assaults, which are usually given to Alexander's Guards, so it seems likely they wore only light armour. Moreover, at the Battle of the River Hydaspes, Curtius says they were 'better at skirmishing than fighting at close quarters.'[151] Arrian says something similar:

> … the Agrianians, who formed the rearguard, had been attacked by the hill tribes. However, their long-range fighting was too good for the enemy, who had the worst of it and withdrew.[152]

The Agrianians were always in the thick of Alexander's battles, and were often called upon to perform special roles. They were the crack light infantry unit of the army and some of the best light infantry in the ancient world. If there was a particularly difficult mission or one that required fast-moving troops, Alexander got the Agrianians to do it. For instance, they were part of a force that marched 120km in two days and surprised the Arians.[153] This rate of advance suggests that they may have been mounted for longer journeys, perhaps riding double with the cavalry with which they so frequently operated. During the siege of Tyre, Alexander firstly took

‘some squadrons of cavalry, the Agrianians and archers’[154] for a quick raid into Arabia; then took with him only ‘the shield-bearing guards and the Agrianians to go to Sidon (to get some triremes).’[155] At the Persian Gates the Agrianians formed one of the largest contingents for the crucial flank attack. They force marched 19km through the night along a rough and narrow path to surprise (from the rear) the Persians defending the pass.[156] It may be safely assumed that the Agrianians were amongst the 300 men who ‘in previous sieges had experience of rock climbing’ and climbed the Sogdian Rock using tent pegs and ropes.[157] At the Rock of Aornos they were part of the small select force that advanced up a rough and difficult track and seized an advance post that enabled the eventual capture of the fortress.[158] Curtius says they also scaled steep cliffs as part of that assault.[159] At the siege of Cyropolis, in Bactria, the defenders were distracted while Alexander, with the Agrianians, the Guards (hypaspists), the archers, and his personal guard (only seven men more), crawled under the walls in a few places where a stream (which was dry) flowed under the walls. They then opened the gates and let in the attackers.[160] That was one of the numerous times when they were under Alexander’s personal command. For the attack on the Uxians they traversed a secret craggy and mountainous path at night and emerged behind the citadel, enabling it to be conquered.[161]

They were also on the right flank in nearly all the battles, usually brigaded near the Companions or Royal Guards and acting as *hamippoi*. For instance, at the Battle of the Granicus, they were placed amongst the lead troops of the right wing. There they caused mayhem by making their way in amongst the Persian horsemen and hamstringing the horses.[162] At the battle for the Shipka Pass, the Agrianians were at the forefront of the charge up the slope that routed the Thracians.[163] At the Battle of Issus, they formed the extreme right flank of Alexander’s army, and charged and routed several times their own number of Persian light troops on higher ground in the mountains. As soon as the Persians retreated, Alexander recalled the Agrianians to strengthen his main attacking force, i.e. his companion cavalry and usual right wing troops.[164]

At Gaugamela, they were split into two units, one brigaded on the extreme right with the Royal Squadron, the other half stationed immediately in front of that squadron and the rest of the Companion Cavalry. The right-wing unit showed their bravery by seeing off the scythed chariots. They ‘hurled their javelins at some of the horses; others they seized by the reins and pulled the drivers off, and standing round the horses killed them.’[165] Curtius says that at one stage in the battle,

Alexander was surrounded by Persian cavalry and in terrible danger, but the Agrianians cut into their rear, assaulted the Persians, and forced them to turn around and defend themselves from the Agrianians instead.[166]

At the Tanais River crossing, the Agrianians were with the lead battalions, firstly helping to fight off the Skythian horse archers, then mixed up with the cavalry that attacked and routed the Skythians.[167] When advancing rapidly through the 'rough and mountainous' territory of modern Bajur and Swat (in Pakistan), to assault the towns there, Alexander took the Agrianians, as part of his small select strike force (Guards, Companions, foot companions, archers, and mounted javelin-men).[168] At the town of Massaga, the mounted javelin-men, the Agrianians, and the archers were the first to go into action, after feigning retreat.[169] Curtius says they also feigned retreat before the walls of another Indian town (between the Musicani and Patalia).[170] Both times the Indians were provoked into a disorderly pursuit outside their town, and defeated.

At the Hydaspes (Jhelum) the Agrianians were taken across the river with the king and his hypaspists. They took their position on the right wing as usual.[171] Curtius says they were instrumental in defeating the Indian elephants.

They were again brigaded with the guards and elite cavalry on the right wing at Sangala.[172] Afterwards they were assigned, along with the three guards regiments and the archers, to a special force that, after working all night, stopped the Indians from leaving the town. The Agrianians were often under Alexander's personal command, as when they were put with the Guards, the archers, and the 'picked cavalry squadron' for the voyage down the Hydaspes and Indus rivers.[173] They were thus the first to arrive after the cavalry for the attack on the Mallians.[174] The Agrianians have never received the recognition due them for their part in the conquest of the Macedonian empire.

The Thyni

The Thyni were closely related to the Bithynians, with whom they often exchanged troops and royal marriages. Xenophon praises the Thyni:[175] 'Teres, with a large army, was said to have had his baggage train taken from him by the natives, who are called Thyni and are supposed to be the most dangerous of all the tribes, especially at night fighting.' He also said that the Thyni were fond of attacking and wrecking shipping that passed their shores (and fighting over the proceeds). They included clubs amongst their weapons.[176]

The Thyni lived in southeastern Thrace. The Bithynian royal family

often married Thracians from across the straits. As they were the tribe closest to Byzantium, they were sometimes able to force that city to pay them protection money. They were often the subject of Greek raids, which they returned with interest. In the middle of the sixth century, they were subject to Croesus of Lydia, and Persian invasions followed.[177] By the time Xenophon observed them, they were back to living independently and fleeing to the mountains when a large army marched by. Nevertheless Seuthes II was able to incorporate them into his realm.[178]

We do not hear much about the Thynians again, although lists of their kings and evidence of agreements made with them have been found in stone inscriptions in the nearby coastal Greek cities of Apollonia Pontica, Mesembria, and Salmydessus. Around 279BC, the Thyni were ruled by Zipoethes the Bithynian. The Heracleans (from a city on the Black Sea coast of what is now Turkey) declared war on him. Ziboetes utterly defeated them and, despite fighting bravely, many of the Heracleans were killed.[179] The Thyni are last heard of during the Mithridatic Wars.

Other references for the Thyni
Xenophon, *Anabasis* VII.2; VII.2.32

The Triballi
The Triballi[180] were independent of the great Odrysian Empire and were not included in Sitalkes' great army.[181] They were a byword for savagery, and an Athenian club for lawless youths was named after them.[182] They are said to have thought it honourable to sacrifice your own father.[183] They were so unruly and bellicose that the early Roman provincial administrators had to settle them separately from one another.[184] The Triballi were often described as a wild and warlike people (e.g. Isocrates), and in Aristophanes, a Triballian is introduced as a specimen of particularly uncivilized barbarian.[185] Aristophanes also said that the Triballi god 'screeched like Illyrians' which may be a reference to the racket produced by Illyrians in battle.[186] Given the Illyrian influence on the Triballi, the latter probably created a similar hullabaloo when fighting. Pliny said they had the evil eye and could kill just by looking at you.[187] In Greek mythology the nymph Thrassa was a Triballian. She was a daughter of Ares (the god of war) and the Naias Teirene (daughter of Strymon) and married the Thracian King Hipponous (son of Triballos, god of the Triballi).[188]

The earliest known home of the Triballi was the 'Triballian plain' (probably the Plain of Kosovo), near the junction of the Angrus and Brongus rivers (the western and southern Morava in central Serbia), but

their territory extended to what is now the valley of the Isker in north-western Bulgaria.[189]

The Triballi were in constant contact with the Getai and Skythians, and frequently used Skythian equipment. Some of the jugs in the Rogozen treasure, for instance, show people in clothing similar to Skythian costume. Polyaenus provides some evidence of direct Skythian pressure on the Triballi.[190] He says that, during one battle with the Triballi, the Skythians ordered their farmers and horse keepers to wait until battle had been joined, then to appear in the distance driving herds of horses. The Triballi thought this was the arrival of reinforcements, and fled. Papazoglu posits that, since the Triballi in this incident were the aggressors, they had travelled down the Danube to the delta and fought the Skythians there.[191] The Triballi lands were remote from the Skythians so it's possible the Skythians mentioned in the sources were in fact Getai.

The Triballi drew up their forces in battle in four ranks (phalanges): in the first went the weaker, in the second the strongest men, in the third the horsemen and in the last the women, who by their curses and scolding prevented the men from running away. By 'weaker' and 'strongest' we should read the lighter (skirmishers) and heavier infantry.[192] Although Triballian phalanges and indeed 'phalanx' are spoken of, it is clear that this just means a disorganized mass of barbarians bristling with spears. As a Triballi warrior used a *'sarissa'* against Philip, a good number of them could be armed with long spears.[193] If all the ranks were the same length this formation might also mean that a Triballi army could be about twenty-five per cent cavalry. If we say that the cavalry needed about twice as much space as the infantry, then the number of cavalry would be half that figure.

This passage is not the only one to mention Triballi cavalry. Lucian mentions 'the cavalry of the Illyrians, the Triballi and all the rest of the mercenaries.'[194] Triballi horsemen are also shown on their artwork. They are not mentioned at the Battle of the Lynginus because the Triballi king and his entourage (i.e. the cavalry) were elsewhere. There may not have been many in their army, though, as the Triballi only contributed infantry to Alexander's army,

Sitalkes died in battle with the Triballi in 424BC, trying to incorporate them into the Odrysian realm.[195] In 376/5BC they suffered a famine and 30,000 of them moved far out of their territory and defeated the Abderans in battle, only to be defeated themselves when Chabrias appeared off the coast with the Athenian fleet and compelled them to retire.[196] In 339BC, when Philip II of Macedon was returning from his expedition against the Skythians, the Triballi refused to allow him to pass the Haemus unless they

received a share of the booty. The Triballi then took the Rogozen treasure (108 silver gilt *phialai* and 54 jugs) when they defeated Philip. It is suggested that this was assembled from tribute paid by coastal towns to the Odrysian kings in 383/2BC, only to be looted by Philip II of Macedon. The Triballi later buried it to hide it from the Celtic invaders around 280BC.[197] Of the battle with Philip, Justin says:

> But as Philip was returning from Skythia, the Triballi met him, and refused to allow him a passage, unless they received a share of the spoil. Hence arose a dispute, and afterwards a battle, in which Philip received so severe a wound through the thigh, that his horse was killed by it; and while it was generally supposed that he was dead, the booty was lost. Thus the Skythian spoil, as if attended with a curse, had almost proved fatal to the Macedonians.[198]

The wound was probably in Philip's right leg, and left him lame for the rest of his life.[199] It seems that the Triballians pursued him, as Polyaenus says Philip was pursued by Thracians, and this is the only known incident where he lost a battle to Thracians.[200] To stop the Thracians, Philip got the rear rank of phalangites (the most trustworthy men) to stop, turn to face the enemy, and lower its spears for action. He ordered them to remain in place when the trumpeter sounded the retreat, while the rest of the army got away.

The Triballi represented a real threat to the security of Macedonia, and Philip mounted several campaigns against them, bringing them under his sway. They rebelled as soon as Philip died, necessitating Alexander's campaign against them. The strength of their threat is indicated by the promptness with which Alexander attacked them. The Triballian king escaped to an island and, although he sent Alexander goodwill gifts, Papazoglu says that the Triballi in the Macedonian army could have been mercenaries, not contingents sent by a tribal chief as a pledge of loyalty, though she favours the contrary view.[201]

The Triballi took advantage of the fighting between the Odrysians and the Macedonians, and expanded to the east between the Danube and the Balkan Range, seizing the lands of the Odrysians and conquering all of southern Thrace almost as far as the Balkan Range.[202] After being trounced by Alexander the Great, they escaped to an island in the Danube. Some modern writers say this island was in the Danube delta,[203] but in the modern Danube there are large islands next to Triballi territory that would suffice.[204] Alexander assaulted the island but failed to take it. Nevertheless

the Triballi contributed infantry to his army for the Asian campaign so that there were 7,000 Odrysians, Triballians, and Illyrians accompanying him.

Sometime after 324BC they were overcome by the Autariatae, the most powerful Illyrian tribe, and lost the Triballian Plain (the valleys of the Southern and Great Morava). They also came under heavy pressure from the Celts and tribes from across the Danube.[205] Around 280BC the Celts headed south and split into three groups, one Cerethrius leading a division against the Thracians and the Triballi.[206] They 'scattered the troops of the Getai and Triballi' according to Justin.[207] Later, the Scordisci drove them out of their lands altogether, pushing them across the Danube into Getic territory. They are said to have then gradually disappeared. Nevertheless, for fifty years (135–84BC) they caused trouble to the Roman governors of Macedonia. The consul Minucius Rufus fought against them and the Scordisci for two years in 109/8BC, and Marcus Crassus encountered them when he pushed into Moesia.[208] In the time of Ptolemy their territory was limited to the district between the Ciabrus (Tzibritza) and Utus (Vid), in modern Bulgaria, their chief town being Oescus (Gigen).[209] Under Tiberius mention is made of Treballia in Moesia, and the Emperor Maximinus Thrax (i.e. Maximinus the Thracian) (AD 235–7) had been commander of a squadron of Triballi. The name occurs for the last time in a letter from Triballis during the reign of Diocletian.

> The few scattered references to them in later times show that the memory of the Triballi was preserved as the once greatest and most powerful tribe in the central region of the Balkans. This explains why, many centuries later, learned Byzantine writers, seeking the ancient name for the Serbs, chose the term Triballi as the most likely.[210]

Their Illyrian origin and mixture of Illyrian, Skythian, and finally Celtic, influences is why they are sometimes referred to as distinct from the Thracians. For instance, when Alexander addressed his mutinous troops in India, he asks what would have happened if the Macedonians had been content with 'checking the encroachment of the Thracians on [their] borders or the Illyrians and Triballians.'[211] Arrian also has Alexander say 'Thracians and Triballians and Illyrians' at the mutiny in Opis.[212]

The archaeological evidence shows that the region of northwestern Bulgaria from the fifth to the first century BC was definitely Thracian but prior to that time it shared the same culture as the area then occupied by the Triballi.[213] Graves from the same area contain a mixture of Thracian and

Celtic weapons, and the argument about whether the Triballi were Celts who used Thracian weapons, or Thracians who used Celtic weapons, continues.[214]

Other References for the Triballi
Isocrates, *Speeches and Letters* VIII.50 (On the Peace)
Isocrates, *Speeches and Letters* XII.227 (Panathenaicus)
Strabo, *Geography* VII.3.8

Glossary

Askos A small vessel for pouring oil with a convex body and a basket handle which reaches to the oblique spout.
Chiton A long, pleated, sleeved tunic worn by both men and women.
Chlamys A small cloak fastened with a pin or a brooch.
Himation A large woollen cloak draped from the right round onto the left arm or shoulder, thus leaving the right arm free.
Hydria A three-handled water jar used for drawing water, as cinerary urns and as ballot boxes.
Kantharos A footed bowl with two high-curving vertical handles set on each side.
Kylix A two-handled drinking cup with a stemmed foot.
Lekythos A flask for toilet oils, perfume or condiments having a cylindrical body, a narrow neck with a deep mouth and one handle. The handle reaches from the shoulder to just below the neck.
Oinochoe A vase with a short globular body and continuous curve from mouth to foot, a high neck with a slightly flaring lip and trefoil mouth, a vertical looped handle which rises above the lip, and a low foot.
Pelike A one-piece amphora, so called because the neck flows smoothly into the body.
Phalera cheek-piece of the horse bits.
Phiale A wide shallow cup, with or without a foot, which generally has a boss rising from the centre.
Rhyton A drinking-vessel. The most common shape is that of an animal horn. Rhytons have an opening near the lower end, which can allow a thin stream of wine to flow into a phial held in the pourer's other hand.

Conversion Factors
463 grains is 30g or 1oz
1lb = 1.453kg and 1kg = 2.205lb
1oz = 480 grains, 1lb = 7000 grains. 1 grain = 0.06479891g
1 ounce = 28.35g
1ft lb = 1.355818 Newton metres

Notes

Abbreviations used in the Notes

***AOTMAPW* –** Head, Duncan. 1982. *Armies of the Macedonian and Punic Wars*, Edition 2, W R G, Devizes

***AG* –** Marazov, Ivan (ed.). 1998. *Ancient Gold. The Wealth of the Thracians. Treasures from the Republic of Bulgaria*, Harry N Abrams, New York

***AG Helsinki* –** Fol, Alexander (ed.). 2000a. *Ancient Thrace*, F G Lonnberg, Helsinki – catalogue of the 2000 Helsinki exhibition (with descriptions of the items supplied separately by Timo Saleminen of the Amos Anderson museum)

***AT* –** Fol, Alexander (ed.). 2000b. *Ancient Thrace* Elektra Publications (International Foundation Europa Antiqua)

***CAH* –**Astin, A E, Walbank, F W, Frederiksen, M W, & Ogilvie, R M. 1989. *Cambridge Ancient History. Vol. 8, Rome and the Mediterranean to 133BC*, Edition 2, Cambridge

T & TT* –** Fol, Alexander & Marazov, Ivan. 1977 ***Thrace and the Thracians, St Martin's Press, New York

***TAG* –** Sekunda, N V. 1996. *The Ancient Greeks*, Osprey Elite Series, London

***TTT* –**Head, Duncan. 1978. 'Thracian Troop Types', *Slingshot* 85, 13–22

***TT* –** Grant, Charles. 1976. 'The Thracians', *Military Modelling*, November & December

***TP* –** Grant, Charles. 1974. 'The Peltast' *Slingshot* 51, 9–17 & 20–1

Introduction (pp. ix-xvi)

1. AG, 18; *T & TT*, 9, 131, 133. All dates are BC unless otherwise specified.
2. Hdt. V.3.
3. *T & TT*, 34.
4. *AG*, 238–9; *AT*, 13; and <http://www.duth.gr/Thrace/thrace.html>. Farkas 1981, 33.

5. Hoddinott 1981, 14.
6. Casson 1977, 3.
7. Hdt. VII.77; Hoddinott op. cit., 56–9; AT, 24; *T&TT*, 139–40.
8. Hdt. VII.78; App., *Mith*. 1; Xen., *An*. VI.4.1; Strab. XII.3.3.
9. Bevan 1966, Vol 1, 81.
10. *AT*, 29–30; Wood 1985, 254.
11. Venedikov 1977, 15.
12. <http://orpheus.ee.duth.gr/Istoria/thracee1.htm>.
13. Sekunda 1996c, 12; e.g. Hdt. V.126, and I.168; Thuc. IV.102.
14. Thuc. I.100.
15. Casson 1977, 2–6.
16. *AT*, 223.
17. Plut., *Them*. I; Hdt VI.42.
18. Hdt. II.67.
19. Just., *Epit*. XV.3.
20. Eur., *Hec*.
21. *T & TT*, 24.
22. Verg., *Aen*.
23. Eur., *Rhes*. 385–6.
24. Val. Flacc. V.649.
25. Livy XXXII.27; Diod. Sic. XIX.11.4; Polyaenus, *Strat*. VII.39 Seiles.
26. Strab. 7 f40

27. Tac., *Ann*. IV.46–51.
28. Xen., *An*. VII.3.32.
29. Livy, XLII.60.
30. Paus. IX.30.6.
31. Polyaenus, *Strat*. II.2.6.
32. Plut., *Alex*. II.
33. Curt. Ruf. III.10.9–10.
34. Thuc. VII.29.
35. Sall., *lug*., XXXVIII; Diod. Sic. XV.36.1–5; Dio Cass., XXXVI; Xen., *An*. II.2; Polyaenus, *Excerpts* IV.7 – see <http://www.home.exetel.com.au/thrace/charactr.htm>.
36. Hdt. V.3.
37. The tribes and their associated source texts are listed on this book's associated web site.
38. Archibald 1998, 40–1.
39. Livy XXXIII.12.
40. Geddes 1987, 321. A *dokimasia* was a court that tested the suitability

of a candidate for public office. The Dokimasia Painter is the modern nickname of an anonymous painter of red-figured vases who worked in Athens between about 490 and 470BC.

41. Gabriel 2008, 66.
42. Stadter 1978, 117–28.
43. Gabriel, op. cit., 67.
44. ibid. 66.
45. Stadter, op. cit., 118.
46. Gabriel, op. cit., 68.
47. Dahm 2008, 40–1.
48. This is the case with the shield in the Kyustendil museum, and is the reason why I am not allowed to include good quality photographs of it in this book.
49. Florov & Florov 2001, 12.
50. Bülow 1987, 10.
51. Marazov 2005, 97.

Chapter 1. Historical Outline: A Brief History of the Struggle for Thrace (PP. 1–22)

1. Farkas 1981, 33.
2. Hdt. IV.94; IV.143; VI.46; Balcer 1988.
3. Hdt. VII.107.
4. Hdt. VI, 36; Bury & Meiggs 1975, 129–30; Dionisotti 1988, 35.
5. Hdt. VI.41
6. Balcer 1988, 9.
7. Hdt. V.13.2.
8. Hdt. V.12.1.
9. Hdt. V.98.
10. Balcer, op. cit., 9.
11. Hdt. VI.33.3.
12. Balcer, op. cit., 12.
13. Hdt. VI.43.1–2.
14. Hdt. VI.45.
15. Balcer, op. cit., 15.
16. Hdt. VII.78.
17. Hdt. VIII.115–16.
18. 60,000 is Ian Cheshire's estimate (ibid. 1987, 13).
19. Hdt. VII.118.1.
20. Hdt. IX.32.
21. Hdt. IX.89; compare with VI.46.

22. Hdt. IX.119.
23. Thuc. I.94.1.
24. Thuc. I.98.1.
25. Thuc. IV.14.
26. Leaf 1915, 6.

27. AT, 110–11; *T&TT*, 150–1; Archibald 1998, 102–3; Hoddinott 1981, 102.
28. Venedikov 1977, 77.
29. *AT*, 111; Archibald, op. cit, 103.
30. Archibald, op. cit., 313.
31. Fol, *T&TT*, 150; Archibald, op. cit. p. 102.
32. A rescue excavation was conducted before the dam was built (in 1948), and the results published in Dimitrov & Chichikova, 1978 and in Chichikova 1983. A project has been seriously proposed to enclose the site in an enormous circular wall so that the water can be pumped out and the project paid for by visiting tourists.
33. e.g. *The Valley of the Thracian Rulers*, the title of a 1998 30-minute video about this area.
34. See Plate 1.
35. *AT*, 112. Archibald, op. cit., 103 gives no date but says Teres died when he was 92. S. Casson 1968, 194 says Sitalkes ascended the throne in 431; Hoddinott 1981, 104 says it was no later than 431. The dating of Thracian rulers involves a lot of guesswork and is highly contentious. I have mostly used Prof. Fol's dates as they fit best with other events.
36. Hdt. IV.80.
37. Thuc. II.100.
38. Thuc. II.100. The annual income of the Athenian empire was around 1000 talents – see Meiggs 1973, 258.
39. Youroukova 1976, 12.
40. Archibald 1998, 104.
41. Venedikov 1977, 78.
42. e.g. Thuc. VII.10.
43. Thuc. II.29 and II.67.
44. Ar., *Ach.* 145.
45. Thuc. II.100 et seq. and IV.101; Diod. Sic. XII.49.50–1.
46. Venedikov 1977, 78.
47. Thuc. IV.129.2.
48. Thuc. V.6.2.

49. ibid.
50. Ar., *Ach*. 170.
51. Thuc. VII.27.
52. Thuc. II.98.
53. Ar., *Lys*. 577.
54. Miller 1984, 155.
55. Thuc. VII.30.
56. Dem., *Arist*. 100.
57. See also Xen., *An*. VII.2.32, and Diod. Sic. XVIII. 105 (405BC).
58. Arist., *Pol*. 1312a.
59. Xen., *An*. VII.5.1.
60. Diod. Sic. XIV.94.3 and Xen., *Hell*. IV.8.26 says that Thrasybulus was also sent on the same mission in 392BC.
61. Plut., *Alc*. XXX.4. Livy XL.44 has a similar story about the Thracian garrison of Amphipolis in 168BC.
62. Corn. Nep., *Alc*., VII.4–IX.3; Plut., *Alc*., XXXVI–XXXVII.
63. Middleton 1982, 298.
64. ibid, 303.
65. Xen., *Hell*. II.4.12.
66. e.g. Plut., *Per*. XIX; App. *Syr*. XI.2.6; Hdt. I.168; Thuc. IV.102; Polyb. IV.44 (279BC); Xen., *Hell*. III.2.8–10 (397BC).
67. e.g. Plut., *Per*. XIX(447BC).
68. Plut., *Alc*. XXXVI.
69. Xen., *An*. I.1.9.
70. ibid.
71. Xen., *An*. I.5.13 and II.2.
72. ibid. I.1; Sabin 2007, 112.
73. Xen., *An*.. II.2.
74. ibid. VII.7.23; I.7.

75. Xen., *An*. VII.2.
76. ibid VII.5.13.
77. Xen., *Hell*. III.2.2.
78. *AG*, 239.
79. *AOTMAPW*, 29.
80. Xen., *Hell*. III.2.2.
81. ibid. III.2.3.
82. Plut., *Ag*. XVI.
83. Corn. Nep. *Iph* XI; Dem., *Arist*. 129.
84. *AT*, 116.

85. Dem., *Arist*. 129.
86. op. cit., 224.
87. Diod. Sic. XV.36.1–5.
88. Florov & Florov, 2001, 114.
89. Heskel 1997, 142.
90. Polyaenus *Strat*. III.9.46.
91. Heskel, op. cit., 148.
92. Diod. Sic. XVI.22.3; *A T*, 117; Diod. Sic. XVI.2.5 & XVI.3.4.
93. *AT*, 117.
94. Parke 1981, 131.
95. Dem., *Arist*. VIII.
96. Venedikov, 1977, 78.
97. Hatzopoulos & Loukopoulos 1980, 95.
98. Polyaenus, *Strat*. III.9.60.
99. Harding 1985, 86–7: Treaty between Athens and three Thracian kings, Athens, 357BC. Fragment of a marble stele, Ionic letters, *stoichedon*.
100. Parke, op. cit., 132.
101. *AT*, 117; Hatzopoulos & Loukopoulos 1980, 95 say this was in 356.
102. This information comes from my own visit to the tomb and from information supplied to me for a web page that I constructed to help raise money to support the preservation of the site. <http://www.geocities.com/athens/aegean/9659;http://members.nbci.com/sitalkes>; Webber 2001a, 49; Kitov 2003, 505–18.
103. Archibald 1998, 234.
104. ibid., 232.
105. ibid., 233. Note that the period up to Philip's conquest is quite chaotic and badly documented so many different interpretations of the evidence are possible and the chronological sequence is uncertain.
106. Diod. Sic. XVI.34.3.
107. Diod. Sic. XVI.71.
108. Archibald, op. cit., 234–6.
109. ibid., 235.
110. *AT*, 114 (from Just. *Epit*. IX.3.1–3); Polyaenus *Strat*.VII.44.1; Archibald, op. cit., 237.
111. Head 2001, 10–13.
112. Polyaenus *Strat*. XLVI.8.
113. Riginos 1994, 116–17.
114. Venedikov 1977, 79. Other authors believe that Arrhideus' mother was Philinna of Larissa, a dancing girl.
115. Paunova 2005, 115.

116. Arr., *Anab*. Plut., *Alex*., XI.
117. See Chapter 8 below for a more complete description, and Fuller 1958, 219–22.
118. Or so I am told by Evgeni Paunov. See his article Paunov 1998.
119. Arr. *Anab*. I.2–4; Fol 1988b. See Plate 2.
120. ibid. I.2–4.
121. ibid. I.4–5.
122. Diod. Sic. 17.17.4.
123. Arr. *Anab*. III.5.
124. ibid. III.13.
125. ibid. II.19.

126. ibid. III.18.
127. Curt. Ruf. III.4.
128. ibid. III.9.9.
129. Arr. *Anab*. I.14.
130. ibid. I.18.
131. ibid. I.29.
132. ibid. II.9.
133. ibid. III.13–15.
134. Diod. Sic. XVII.65.1.
135. Arr. *Anab*. VI.27; Curt. Ruf. X.1. Curtius says that Sitalkes and his fellow executioners had 1,000 cavalry and 5,000 infantry, and that one of the other officers was Agathon, who commanded the Odrysian cavalry at Gaugamela and the Granicus (Arr. *Anab*. I.14.3; III.12.4).
136. Florov & Florov 2001, 47.
137. Curt. Ruf. VIII.14.24–30.
138. Arr. *Anab*. I.27.
139. ibid. II.5.
140. ibid. II.9.
141. ibid. III.27.
142. ibid. VI.27.
143. Curt. Ruf. X.1.
144. ibid. IX.3.21; *AT*, 224; Lund 1992, 19.
145. Curt. Ruf. X.1.44; Just., *Epit* . II.3; *AT*, 225; Hoddinott 1981, 122.
146. Curt. Ruf. X.1.45.
147. Lund 1992, 20.
148. Venedikov 1977, 79.
149. Diod. Sic. XVIII.14.2, 323BC.
150. Marazov 2005, p. 239.

151. *AOTMAPW*, 17.
152. Diod. Sic. XIX.73.5.
153. ibid. XX.29.1.
154. ibid. XXI.11–12 ; Polyaenus, *Strat*., VII.25.
155. Diod. Sic. XVIII.30–2; Plut., *Eum*.
156. Diod. Sic. XIX.14.5.
157. ibid., XIX.27.5 and 29.3.
158. Sabin 2007, 153.
159. Diod. Sic. XX.22–3.3.
160. Hoddinott 1981 , 126; Archibald 1997, 311–13; *AT*, 123.
161. *AT*, 123.
162. ibid, 123 & 226.
163. At least two *rhomphaia*s have been found twisted into a spiral knot, i.e. ritually destroyed. Torcs have been found in Thracian graves and Thracian people are depicted wearing them on Thracian metalwork.
164. Emilov 2005, 328–9.
165. ibid., 327.
166. Polyaenus, *Strat*., IV.16.
167. Warry 1980, 93; Griffith 1935, 144.
168. Parke 1981, 252.
169. ibid., 250.
170. Sekunda 1994, 18.
171. ibid.
172. Livy XXXI.1 & XXXI.18.
173. ibid. XXVI.25 & XXVII.5.
174. ibid. XXXIII.4–XXXIII.10.
175. App. *Syr* . XI.2.6.
176. Livy XXXVII.40–3.
177. Griffith, op. cit., 145–6.
178. 2 Macc. XII.35.

179. Sekunda 1994, 75.
180. 1 Macc. III.13.
181. Bar-Kochva 1989, 119, 133.
182. Livy XXXVIII.40–1.
183. ibid. XXXVIII.41.
184. ibid. XL.58.
185. loc. cit.
186. ibid. XLII.52.
187. loc. cit.

188. loc. cit.
189. Plut., *Aem*. XVIII; Livy XLIV.40.
190. Plut., *Aem*. XVIII; Sabin 2007, 202.
191. Livy XLIV.42.
192. Sabin 2007, 200.
193. Livy XLV.19.
194. e.g. ibid. XLV.14.
195. Diod. Sic. XXXII.15.
196. ibid. XXXII.15.
197. Strab. VII.5.12; Livy XI.58; for more detailed information on this tribe, see Papazoglu 1978, 271–391.
198. ibid., 417–19.
199. Sall., *Iug*., XXXVIII. There are several other recorded instances of Thracian troops switching sides in the middle of a battle.
200. Livy, *Epit*. 74, 76; Delphi was sacked by the Maidi and other tribes – Hoddinott 1981, 128.
201. *AT*, 227.
202. App., *Mith*. X.69.
203. *AT*, 227.
204. Hoddinott 1981, 130.
205. Plut., *Luc*.
206. Dio Cass., XXXVI (68BC).
207. *AT*, 120–1.
208. loc. cit.
209. Hoddinott 1981, 129–30; *AT*, 228.
210. loc. cit.
211. *AT*, 228.
212. Venedikov 1977, 79.
213. *AT*, 126; Hoddinott 1981, 130.
214. Dio Cass. LIV.34.1–7.
215. Florus II.27.
216. Tac., *Ann*. IV.46.
217. ibid. IV.46–51.
218. ibid., *Annals*, II.64.1–5; 65.1–5; 67.1–4.
219. Florus II.27.
220. Tac., *Ann*. III.39.
221. *AT*, 127.
222. Tac., *Ann*. IV.46.
223. Caes., *Civ* II.95.
224. App., *BCiv*. IV.11.87–8.

225. ibid.
226. Plut., *Ant*.
227. App., *BCiv*. IV.11.87–8.
228. Plut., *Ant*. LXI.61; LXIII.4
229. Marazov 2005, 239; *AT*, 127.
230. Venedikov 1977, 80.
231. Strab. VII.3.13.
232. *AT*, 228.
233. App. *BCiv*. III.3.24–5.
234. Giurescu 1972, 24 (AD 12/13); *AT*, 230 says 100,000 people were moved.
235. Millar 1981, 277.
236. AT, 127–9; Wilcox & Embleton 1987, 24–6.
237. Millar 1981, 279.
238. Sokolov 1974, Fig 172.
239. Jarrett 1969, 215.
240. *AT*, 145.
241. Marazov 2005, 239.

Chapter 2. Thracian Costume (pp. 23–34)

1. Xenophan., *Sat*. – Fragments 16; Casson 1968, 164; *CAH*, 544.
2. Tarn & Griffith 1974, 105–6 & 258.
3. *CAH*, 544.
4. Hom., Il. IV; Arist., *Gen. An*.; Plut., *Thes*. V.
5. Archibald 1998, 206-7; Head 2001, 15.
6. *CAH*, 543.
7. Hdt. IV.110.
8. Hom., *Il*. IV.
9. Plut., *Thes*. V; Papazoglu 1978, 460.
10. Hdt. VI.36.
11. ibid. V,6.
12. Levi 1987, 137.
13. MacKendrick 1975, 6–10 ‘figurines of steatopygous tattooed women’.
14. Cic., *Off*. VII.25.
15. Durham 1928, 101.
16. Farkas 1981, 45.
17. Hdt. V.6.
18. Levi, op. cit., 127; *CAH*, 543.
19. *TTT*, 15.

20. *CAH*, 543.
21. Trippett 1980, 113 shows these tattoos; however Durham 1928, Fig. 3, 103 & Fig. 4, 105.
22. Farkas 1981, 45.
23. Val. Flacc. II.135.
24. ibid. II.107.
25. ibid. II.135.
26. Hdt. VII.75. See Plate 5a.
27. Xen., *An*. VII.4.
28. Oppermann 1984, Plate 52.
29. See Plate ?.
30. Hdt. IV.74; Eur., *Hec*., 1153–5 (Penguin translation, p. 98).
31. Georgieva et al. 1999: English summary at <http://members.tripod.com/~Groznijat/thrac/ethno/thrac_ethnol.html>.
32. See Plate ?.
33. See Plates ?.
34. ibid.
35. Paunova 1999, 15–29.
36. Eur., *Hec*. 1153–5 Penguin translation, p. 98).
37. See Plate ?
38. Hdt. VII.75; Xen., *An*. VII.4; Head 2001, 15; Archibald 1998, 207–8; Warry 1980, 50; Georgieva et al. 1999 – summary.
39. Pl., *Resp*. 327a.
40. TTT, 14 – only mentions two types but Duncan now agrees with me that there were three. See <http://home.exetel.com.au/bmboats/appearan.htm>.
41. *CAH*, 536.
42. Saatsoglu-Paliadeli 1993, 136; *AOTMAPW*, 135.
43. Head 1999, 38.
44. Saatsoglu-Paliadeli, op. cit., 136.
45. ibid, 140.
46. *AT*, 60.

47. Dimitriova et al. 2001, 162, Pl. 149.
48. Minchev & Pletnyov 2006, 99, Pl. 65.
49. ibid, 316.
50. Rigopoulu & Kotsos 2000, 44.
51. Head 1999, 36.
52. ibid, p. 37.
53. ibid, p. 38.

54. Hdt. VII.75; Xen., *An*. VII.4; Head, op. cit., 15; Archibald 1998, 207–8. See Plates 5a, 5d.
55. e.g. Marazov 1998a, 234, Pl. 200; *AG Helsinki*, 80, Item 40; see Pl. 14b.
56. Zhivkova 1975, Pls 14–18; Fol et al. 1986, 110–13; Webber 2001a, 47–50; <http://home.exetel.com.au/thrace/alexandrovo_tomb.htm> ; <http://members.tripod.com/~Groznijat/thrac/aleksandrovo_1.htm> ; <http://home.exetel.com.au/thrace/kazanluk.htm>. I have visited and photographed the Kazanluk tomb three times and the Sveshtari tomb once.
57. Kitov 2003a, 26, n. 12.
58. In Kitov 2005a, these horsemen are Figs 70, 80, 57, and 89 respectively.
59. Kitov 2005b, 27.
60. ibid, 25.
61. This information supplied by David Karunanithy from his research for his forthcoming book on the Macedonians.
62. Kitov, op. cit., Pl. 79.
63. Geddes 1987, 312.
64. ibid., 312; Burrell 1997, 158.
65. This suggestion was made by David Karunanithy.
66. Kitov, op. cit., Pl. 33.
67. ibid., Pl. 25.
68. Marazov 1998a, 80–2.
69. Fol et al. 1986, 114.
70. Webber 2001a, 47–9; Head 1999, 17; *AOTMAPW*, 124–9.
71. ibid.
72. Burrell 1997, 158.
73. Ar., *Av*. 1567–71.
74. *AG* , 234–6, Figs 200 and 202, respectively.
75. Like Oryahovo, Yakimovo is on the Danube.
76. Venedikov 1976, 78, Pl. 390.
77. Polyaenus, *Strat*. 4.16.
78. App., *Mac*. 2 (Peiresc MS).
79. Val. Flacc., II.107.
80. See note 37 above.
81. Barker 1971. See Plate 3.
82. National Archaeological Museum, Sophia, Inv. 8409. Venedikov & Gerassimov 1976, Pl. 334.
83. Plut., *Aem* XVIII.

84. loc. cit.
85. Head 1999, 40.
86. Marazov 1998a, 80.
87. MacKendrick 1975, Fig. 4.23.

Chapter 3. Armour (pp. 35–52)

1. Archibald 1998, 197.
2. ibid.
3. Ogenova-Marinova & Stoyanov 2005, 521.
4. Florus II.27.
5. Cheshire 1987, 13.
6. <http://www.camulos.com/virtual/guidee.htm#longinus 27/11/08>.
7. Marazov 1998a, 75.
8. Archibald, loc. cit. See Plate 9.
9. Everson 2004, 184.
10. Archibald, op. cit., 252.
11. Stoyanov 2005, 646–8.
12. Salminen 2000, 13.
13. Minchev & Pletnyov 2006, 94. The Zlatinitsa helmet is decorated with appliqués of a two-headed snake, with one tail over a one-headed snake that has two tails.
14. Ogenova-Marinova & Stoyanov, op. cit., 522.
15. Archibald, op. cit., 201.
16. Ogenova-Marinova & Stoyanov, op. cit., 520.
17. *Hellas: Soldiers of Bronze – Hellenistic Arms and Armour* <http://wildfiregames.com/0ad/page.php?p=1568>.
18. ibid.
19. See Plate 10.
20. Hind 1983, 254.
21. Archibald, op. cit., 201.
22. Venedikov 1976, 55, item 246; *Gold der Thraker* 1980, item 242; Head 1999, 21. See Plate 10b.
23. Ogenova-Marinova & Stoyanov 2005, 520.
24. Archibald, op. cit., 254. Ogenova & Stoyanov (op. cit., 30, n. 1) say she is mistaken; in fact it is not a helmet but the face of a *machaira* shaft.
25. Ogenova-Marinova & Stoyanov, op. cit., 519–39.
26. As defined by Pflug (1988, 137–50) and catalogued by Ogenova-Marinova & Stoyanov.

27. Ogenova & Stoyanov, op. cit., 539, map.
28. ibid., 649.
29. ibid., 651.
30. ibid., 650.
31. ibid.
32. *Hellas: Soldiers of Bronze – Hellenistic Arms and Armour* <http://wildfiregames.com/0ad/page.php?p=1568>.
33. Salminen 2000, 13.
34. *TTT*, 18; Best 1969, Pl. 6.
35. Head 1999, 38.
36. *AG Helsinki*, No. 34, p. 79.
37. Head 1978a, 10.
38. Plate 11.
39. Archibald 1998, 255; she says the Chalkidian style was also popular with the Skythians.
40. Dumitrescu & Vulpe 1988, Fig. 33; Items 177, 150, 199 from *IDaci* 1997; Marazov 1998a, Fig. 16. See Plate 12.
41. *TTT*, 19.
42. Ogenova-Marinova & Stoyanov, op. cit., 519.
43. ibid., 520–1.
44. ibid., 521.
45. Everson 2004, 184.
46. Archibald, op. cit., 204.
47. Grant 1976.
48. National Archaeological Museum, Sophia Inv. 8409; Venedikov & Gerassimov 1976, Pl. 334.
49. Hom., *Il*. X.
50. Eur., *Rhes*. 380–5.
51. Archibald, op. cit., 198; Head 1978a, 19; National History Museum, Sofia guide, 1986, No. 68; Venedikov 1976, 50–1. See Plate 13.
52. Archibald, op. cit., 197–8.
53. Minchev & Pletnyov 2006, 94–7.
54. ibid., 62; Dr. Kisjov's comments were for the Bulgarian National radio (March 2005).
55. From the News section of the National History Museum (Sofia) web site.
56. Kitov 2005f, 48.
57. Ogenova-Marinova & Stoyanov 2005, 528.
58. Carey 2007, 154.
59. Kitov 2003a, 514.

60. Archibald (1998, 256) does not show these, but mid-fifth-century silver gilt appliqués from another suit of armour were found in Golyamata Mound, Douvanli (north of Plovdiv) – five lions' heads, a gorgon's head, and two showing winged Nike on a chariot. Ogenova-Marinova 2000, 16 has a reconstruction; while the best pictures of the appliqués are Venedikov & Gerassimov 1976, Figs 226–8. See Plate 13b.
61. Youroukova 1976, 34–8.
62. Archibald, loc. cit.; Marazov 1998a, 175; Venedikov & Gerassimov, op. cit., Figs 248 & 250; see Plate 22b.
63. Archibald, loc. cit.
64. Xen., *An*. VII.3.40.
65. *TTT*, 18.
66. Everson 2004, 186.
67. See Plate 14.
68. *AOTMAPW*, 128; *TTT*, 18; Archibald, op. cit., 198.
69. Vickers 2002, 62.
70. Everson, op. cit., 186.
71. Venedikov 1994, 150.
72. Venedikov 1977a, Pl. 7.
73. Plut., *Alex*. XXXII (Penguin translation) says it was a steel gorget set with precious stones.
74. Vickers, op. cit., 60.
75. Archibald, op. cit., 255–7; *AOTMAPW*, 128.
76. *AOTMAPW*, loc. cit.
77. Everson, op. cit., 186.
78. Kitov 2005c, 143; 2005e, 420–6; 2006, 18.
79. Everson, loc. cit..
80. Archibald, op. cit., 246.
81. ibid., 57.
82. Dr Engin Beksaç from Edirne University told me this on seeing the front cover of my previous book, saying the predicted reconstruction shown was exactly correct.
83. e.g. Kitov 2005g, 63. Page 85 refers to a 'leather–made mail'.
84. A second-century mail shirt has been found near Rousse.
85. Kitov 2005f, 47–8.
86. Kitov 2005g, 85.
87. Marazov 1998a, 160–9; *TTT*, 18–19. See Plate 15.
88. Cernenko 1983, 7 & Pl. D; *AOTMAPW*, 128–9.

89. Archibald 1998, 255.
90. Hoddinott 1975, 93.
91. *AOTMAPW*, loc. cit.
92. I have seen both the partially restored armour and its original state.
93. A pair of greaves from Campania (fourth century BC) has two very small rings riveted behind the knee and another pair behind the ankle. Connolly 1981, 71, 78, 80, 106, 107, 109.
94. Snodgrass 1999, 53.
95. This has been experienced by modern re-enactors, who have posted the information on the Roman Army Talk discussion group.
96. Archibald 1988, 255. See Plate 17.
97. *T&TT*, 41, 87, & 96; <http://home.exetel.com.au/thrace/greaves_main.htm>; Archibald op. cit., 255; items 151 and 152 from *I Daci* 1997; *TTT*, 18–19; Agighiol is in the northernmost part of the Danube delta, in Romania.
98. Venedikov 1977a, Pl. 6.
99. Farkas 1981, 45.
100. Kitov 2005f, 46.
101. Webber 2001a, 50; <http://home.exetel.com.au/thrace/alexandrovo_tomb.htm>; <http://www.geocities.com/vakarr>.
102. *AT Helsinki*, 79–80, Nos 38–9; Archibald 1998, 255.
103. This is the pair I photographed in Kyustendil museum; it is not mentioned elsewhere – the description comes from Evgeni Paunov, and another description of the associated helmet in the Helsinki exhibition catalogue.

104. Plut., *Aem*. XVIII.
105. These suggestions and alternative translations were supplied by Duncan Head during discussion about my first book.
106. Anderson 1970, 113.
107. Archibald 1998, 203.
108. Balcer 1988, 7.
109. Xen., *An*. V.2.29 – a small party half-concealed on a scrub-covered hillside was able to give the impression that there was a large force in ambush by flashing their *peltai*.
110. Plut., *Pomp*. XXXV.
111. *AOTMAPW*, loc. cit. The terms *porpax* and *antilabe* strictly speaking apply only to a hoplite shield, but the use was similar so it is

convenient to use the terminology here also.
112. Xenophon, *Anabasis* VII.4.17.
113. Connolly 1981, 48.
114. Minchev & Pletnyov 2006, 77.
115. See for instance, <http://hopliteconsulting.net/yahoo_site_admin/assets/images/hoplite_armure.212192758_std.jpg>.
116. Archibald 1998, 204.
117. Marazov 1998a, 62.
118. Kitov 2005b, 18.
119. This shield isn't completely published and the information was obtained by email from the archaeologists studying it. The excavations were carried out by Lidia Staikova-Aleksandrova.
120. Feyel 1942, 193–5; Fraser & Ronne 1957.
121. Ueda-Sarson 2002b, 25.
122. *AOMAPW*, 126.
123. Topalov 2002, 571, Fig. 9.1. I haven't seen this shield so it could just be an *aspis* viewed from the side, drawn to look oval.
124. It is now in the Kyustendil museum, in south-western Bulgaria, and has previously been referred to as 'the Kyustendil shield'. See plates.
125. This information was supplied in an email by Lidia Staikova and Miroslava Taskova of the Regional History Museum Kyustendil.
126. These items have not been published but there are two preliminary publications: 1. Staikov & Manov 1992; 2. Staikova-Aleksandrova 2006.
127. Connolly 1981, 118–20.
128. Ueda-Sarson 2002b, 23.
129. Livy XXXVIII.21.
130. Plut., *Phil*. in Ueda-Sarson 2002b, 23.
131. Ueda-Sarson loc. cit.
132. I gained this insight from discussions with Dark Age re-enactors, who used similar shields for this purpose.
133. Sekunda 1995, 22.
134. Bar-Kochva 1974, 14.
135. Rumsheid & Held 1994, 89–106, Taf. 20. This shows an early second-century Bithynian funerary banquet, battle scene, and hunting scene on a grave monument for members of an indigenous family of notables, with Thraco-Bithynian names. It was found under 8m of sediment at Adliye on the Sangarius, thought to be the site of ancient Tarsos.
136. Sekunda, op. cit., Fig. 77.
137. Hammond & Walbank 1988, Appendix 7.

138. Kitov 2005g, 12–13, Pl. 10.

Chapter 4. Weapons (pp. 53–78)

1. See Plate 18.
2. Thuc. II.98, II.100, VII.27.
3. Xen., *Cyr.* VI.2.10.
4. Item 42 from the 2000 Helsinki Exhibition.
5. Item 43 from the 2000 Helsinki Exhibition.
6. Marazov 2005, 45.
7. Archibald 1998, 257–8.
8. Hdt. VII.75.
9. TP, 9–17 & 20–1.
10. Marazov, op. cit., 45.
11. Hom., *Il.* XIII, also translated as 'his Thracian broadsword'.
12. Ov., *Met.* XIII.778.
13. Hom., *Il.* XXIII.805 – this is also translated as 'this handsome broadsword, silver-hilted, Thracian...' or as simply 'inlaid with silver' – Kirk et al. 1985.
14. Hodges 1974, 170–1.
15. Item 44 from the 2000 Helsinki Exhibition.
16. Bülow 1987, 80.
17. Carey 2007, 24.
18. Venedikov 1977a, 11.
19. ibid, 12.
20. Hoddinott 1975, 59.
21. I have not seen this and am unable to verify this claim. This information was supplied by Evgeni Paunov during a visit to the area. He said that unfortunately a large number of tombs that were excavated decades ago still have not been published.
22. See Plate 18.
23. Archibald 1998, 257–8.
24. *AOTMAPW*, 126; Snodgrass 1999, 85.
25. Kitov 2005f, 48.
26. See Plate 6.
27. Archibald, op. cit., 203.
28. Cernenko 1983, 15–17.
29. Cernenko, op. cit., 17.
30. *AT Helsinki*, 81, item 46.
31. Thuc. II.98, II.100, VII.27.

32. Sekunda 2001, 34–42; Snodgrass, op. cit., 84–5; Connolly 1981, 63; Archibald, op. cit., 203.
33. Archibald, loc. cit.
34. It is 82cm long, from the Golyana tumulus at Douvanli. Archibald, loc. cit; Hoddinott 1975, 63, Fig. 4.
35. *AT Helsinki*, 81, Item 45.
36. Val. Max. III.2 int 12.
37. 2 Macc. XII.35; Sekunda 1994, 18.
38. Arr., *Anab*. I.16.
39. Sekunda, loc. cit.
40. For a similar curved blade found at Olynthus, dated to 348BC see Robertson 1941, Pl. CIV. This blade is more likely to be a *harpe* (a ritual blade).
41. See Snodgrass 1999, 119; Best 1969, 104; Archibald 1998, 254–5; TP; Grant 1976; King 1977; Head 1978a; Grant & Barker 1978; Nickels 1978; Head 1978b; *TTT*; Sekunda 1983; Kolev 1985; Szwaba 1985; Sekunda 1996a.
42. I made these measurements myself in the Plovdiv museum and elsewhere; these measurements are confirmed in Kolev's article, and in the Helsinki catalogue (items 41 and 49).
43. This information was obtained from the buyer, who consulted me before making the purchase, directly from Kirby Wise, who made the replica, and <www.myarmoury.com/talk/viewtopic.php?t=5972>.
44. Kolev 1985.
45. Ogenova-Marinova & Stoyanov 2005, 527.
46. Livy XXXVIII.21.
47. Stojanova-Serafimova 1975.
48. Plut., *Aem*. XVIII.
49. Curt. Ruf. VIII.14. 24–9.
50. Barker 1978.
51. Livy XXXI.39.11.
52. ibid. XLII.59.
53. Sekunda 1983, 280.
54. Livy XLII.60.

55. Gell., NA. X.25 (Loeb translation); Livy XXXVII.40–3; Sekunda, loc. cit.
56. ibid., 282–3.
57. Plut., *Aem*. XVIII.
58. See Plate ???.

59. Val. Flacc. VI.94–100 (Loeb translation).
60. MacKendrick 1975, 44.
61. Livy XL.58.
62. Strab. VII.3.2.
63. Livy XXXVIII.21–2.
64. Op. 573, ed. Schmidt 1867.
65. Claud., *Epig*. XXVII.9.
66. *I Daci* 1997, items 679, 460–2 respectively.
67. Sekunda 1996a.
68. Cerams 1999. The carvings are attributed to the reign of Tudhaliya IV (C.1237BC).
69. Sim 2000; <www.myarmoury.com/talk/viewtopic.php?p=56025>.
70. e.g. Eur., *Hec*. 1155.
71. Hom., *Il*. IV.4.
72. Archibald 1998, 202–3.
73. Hdt. VI.36.
74. Warry 1980, 50.
75. Harris 1963, 35.
76. ibid., 30.
77. Harris, op. cit., 30–1.
78. Cotterall & Kamminga 1990, 164–74.
79. ibid., 35.
80. Mihaylova 1992, 89.
81. Nikolova 2002, 14–15.
82. ibid., 14.
83. A double-headed axe was one of the symbols found in 2007 incised into the rock outside a tenth-century-BC dolmen tomb.
84. *AG* , 190–1.
85. Marazov 2005, 52.
86. Plut., *Quest*. *Graec*. XLV.
87. ibid., LI.
88. Hoddinott 1981, 62.
89. Stoyanov et al. 2006, 44.
90. ibid., 41–4.
91. ibid., 43–4.
92. Verg., *Aen*. V.409.
93. Stoyanov et al. 2006, 40–1.
94. Kitov 2005c, 137–46.
95. Eur., *Rhes*. 30.
96. Pritchett 1991, 47–52.

97. <http://cat.une.edu.au/page/asagi%20pinar> – The site is a mound (Aşağı Pinar) occupied from the Stone Age to the Iron Age. For futher information on Turkish Thrace (Trakya) see also <http://www.thracian.info> and <http://cat.une.edu.au/section/region/107>.
98. Stoyanov et al. 2006, 44.
99. Paunov & Dimitrov 2000, 44–57.
100. Dohrenwend 2002, 38.
101. ibid., 45.
102. Richardson 1998; *AOTMAPW*, 99.
103. Elliot 2008.
104. Paunov & Dimitrov, op. cit., 44.
105. Stoyanov et al., loc. cit.
106. Livy XLII.25.
107. Dohrenwend, op. cit., 33.
108. Echols 1950, 227.

109. Hom., *Il.* XIII.599 and XIII.716; Elliott 2008, 25.
110. Livy XXXVIII.29.6.
111. Elliott, loc. cit.
112. This information was provided by David Willis, a re-enactor, in a discussion on Roman Army Talk 14/3/08.
113. Hawkins 1847.
114. Elliot, op. cit., 24.
115. Barak Bruerd: <http://slinging.org/index.php?page=slinging-technique>.
116. Dohrenwend, op. cit., 45.
117. ibid., 41.
118. Hanson 1999, 216.
119. ibid., 157.
120. Dohrenwend, op. cit., 36.
121. ibid.
122. O'Leary 1975, 25.
123. King 1974, 23. Xenophon says that the Persians used sling stones 'as big as your fist'.
124. <http://www.mallorcaweb.net/foners/tirarfona/00_Apertirar.htm> viewed on 23 March 2008.
125. Dohrenwend, op. cit., 39.
126. King, op. cit., 23.
127. Paunov & Dimitrov 2000, 50.
128. Hanson 1999, 157.

129. Dohrenwend, op. cit., 43.
130. Judges 20:16.
131. Livy XXXVII.29.7
132. Florus I.43.8.
133. Livy XXXVIII.29.5.
134. King 1974; Norris 1975; O'Leary 1975. The Wargames Research Group rules and the Warrior rules agree on this and the figure did not change through seven editions of the rules.
135. Richardson 1998, 50.
136. <http://www.mallorcaweb.net/foners/tirarfona/00_Apertirar.htm>.
137. Polyaenus, *Strat*. X.11.
138. McLeod 1965, 12.
139. Dohrenwend 2002, 42.
140. McLeod, op. cit., 1–13.
141. Cassin-Scott 1999, Pl. C1 and 35.
142. Xen., *An*. VII, 4.
143. E.g. *AG* 141, Pl. 67; Marazov 1988, 28 line drawing & Pls 153–4.
144. *AG* 172, Pl. 102.
145. Veliko Turnovo History Museum, Inv. No. 1728P *AG* 174, Pl. 104.
146. Sumner 1997.
147. On the opposite side of the amphora from the 'Seven against Thebes' scene – see *AG* Pl. 71.
148. Hind 1983, 258–60.
149. Arr., *Anab*. I.1.6.
150. Bloedow 1996.
151. Heckel & Jones 2006, 62; Heckel 2005.
152. Markle 1978, 492.
153. Sall., *H*. III.36M.

Chapter 5. The Thracian Army (pp. 79–131)

1. Strab. VII.f47.
2. Ar., *Ach*. 145 – this was in autumn 429.
3. Eur., *Rhes*. 300.
4. Hdt. V.3.
5. Xen., An.VII.4.19.
6. ibid., VII.3.32.
7. e.g. Xen., *An* VII.3.26–9; Thuc. II.97. As previously mentioned, there is also Iphicrates' marriage to Kotys' daughter, which is described in Ath. IV.131b–c.

8. op. cit. VII.7.23; I.7; TTT, 21 and Best 1969, 76.
9. Xen., *An*. III.3.16.
10. Diod. Sic. XIV.31.5.
11. *TTT*, 76.
12. Xen., *An*. VII.2.
13. ibid. III.3.16.
14. ibid. VII.3.
15. ibid. VII.5.15.
16. ibid. VII.5.15; VII.4.20.
17. Polyaenus, *Strat*. III.9.46.
18. e.g. Arr., *Anab*. I.2–4.
19. Thuc. II.100; *AOTMAPW*, 29; *TTT*, 14–17.
20. Hom., *Il*. II.
21. Thuc. II.96.
22. ibid. II.100.
23. Diod. Sic. XVIII.14.2.
24. Xen., *Hell*. III.2.2.
25. Polyaenus, *Strat* . VII.38.
26. Arr., *Anab*. I.4–5.
27. Hanson 1999, 30–1.
28. ibid., 34.
29. Hom., *Od*. IX.49–54.
30. Eur., *Rhes*. 300.
31. Eur., *Hec*. 707–9.
32. ibid., 7–10 (Penguin translation).
33. Hom., *Il*. XIII.1 (Loeb).
34. ibid. XIV.
35. Archibald 1998, 204.
36. *AOTMAPW*, 127–9; *TTT*, 17–20; *TP*; Barker 1978, Fig. 5
37. Archibald, op. cit. 204–6; see Plate 5d.
38. Boardman 1999, 238.
39. Thuc. II.100.
40. Arr., *Anab*. I.2–4. The Triballi king and his entourage were not at the battle, and they would include most of the heavy cavalry, so perhaps the force mentioned is not representative of all royal armies.
41. *AOTMAPW*, 29; *TTT*, 14–17.
42. Sidnell 2006, 32.
43. Probably there is a fifth-/fourth-century Odrysian citadel/capital waiting to be found on top of an isolated hill near Kazanluk, Stara Zagora, or Nova Zagora.

44. Kitov 2005g, 16.
45. I Georganas, 'Mycenaean Society: Structure and Economy' *Mediterranean Archaeology Resources* (2001). Available: <http://www.geocities.com/i_georganas/society.html> viewed on 31 December 2007.
46. Sidnell, op. cit., 223.
47. Xen., *Hipp*. XII.
48. From Clement of Alexandria's *Stromata* ('Miscellanies') I.16. The Inventors of Other Arts Were Mostly Barbarians.
49. See Plate ????
50. The director of the Sozopol museum was having the Sozopol vase's clay tested in France to confirm this theory when I visited the Sozopol museum in 2008, but he was quite confident of the result.
51. *AT*, 46.
52. e.g. the fifth-century-BC jug from Karnobat; Marazov 1988, 56; Georgieva 2005, 32–7.
53. *AOTMAPW*, 127–9.
54. Ueda-Sarson 2004, 21–5.

55. Livy XXI. 35; Sidnell, op. cit., 141 suggests that only light cavalry was involved on both sides.
56. Xen., *An*. VII.4.17.
57. Ueda-Sarson, op. cit. 23.
58. Griffith 1935, 250.
59. Anderson 1961, 22.
60. Gratius Faliscus (in Duff & Duff 1968) lines 150–541.
61. Hyland 2003, 148.
62. *CAH*, 542.
63. Archibald 1998, 205.
64. Georgieva 2005, 34–5.
65. Xen., *Hipp*. VIII.
66. Hom., *Il*. X.
67. Theoc., *Id*. XIV, 48.
68. Campbell 1988, 95, frag. 417.
69. <http://members.ozemail.com.au/~ancientpersia/cavalry.html>, viewed on 20 December 2001.
70. Hyland 2003, 148.
71. See Plate 26.
72. Archibald, op. cit., 247–51.
73. Marazov 2005, 19.

74. Archibald, loc. cit.
75. Sidnell 2006, 84; DiMarco 2008, 26.
76. *AOTMAPW*, 51, 127–9.
77. ibid., 127.
78. Stoyanov et al. 2006, 45.
79. Torbov 1998, 54–63.
80. Sanz 2005.
81. Mihaylova 1992, 89–90.
82. Stoyanov et al., op. cit., 44.
83. Sidnell, op. cit., 82.
84. ibid.
85. Markle 1978, 490.
86. Paris, Cabinet des Medail, <http://www.ancientbattles.com/WAB_Macedonians/Mac_xyston.htm>.
87. National Museum of History Inv. 22459. Plate ????
88. *AOTMAPW*, 127–8, 173–4; Webber 2001a, 50; one is shown on the dome of the Kazanluk tomb. The leopard skin can be seen on p. 95 of Marazov 2005.
89. *AOTMAPW*, loc. cit.; Webber, loc. cit.
90. Vinogradov & Nikonorov 2007.
91. Sidnell 2006, 228.
92. National Museum of History inv. No. 22459 (AG Pl. 83; *AG Helsinki* No. 33). See Figure 3.
93. DiMarco 2008, 62.
94. Sekunda 1994, 17–18, 72, and Pl. 6b.
95. See Plate 21.
96. Ueda-Sarson 2004, 21–5; Fields 2008, 28–30.
97. Hammond & Walbank 1988 – Appendix 7 and Fig. 20. The shieldless cavalry are Figs 1, 10, 11, 18, 21, 23, 28. Nos 10 and 23 could be Thracian. Nos 1, 21, and 28 are thought to be Roman.
98. Livy XXXI.34.
99. Sidnell, op. cit. 139–40.
100. Sekunda, op. cit., 18.
101. Livy XLII.52.
102. Sabin et al. 2007, 223.
103. Two other vases that display this behaviour are the Sozopol and Munich vases.
104. Sabin et al., loc. cit.
105. Arr., *Anab*. I.16.

106. *AOTMAPW*, 51.
107. Thuc. V.57.2.
108. Spence 1993, 58.
109. ibid., 59.
110. A video of the premier Australian endurance riding event, the Shazada, is available. It shows riders doing this.
111. Spence 1993, Pl. 10.
112. Heckel & Jones 2006, 42.
113. Curt. Ruf. VIII.2.35–7.
114. Amm. Marc. XVI.3.
115. Caes., *African War* 14–17; Montagu 2006, 111.
116. Pritchett 1991, 47–52.
117. Xen., *Hell*. II.4.12. The Thracians are not mentioned by name, but other evidence indicates that the slingers were most likely Thracian. See Middleton 1982, 300.
118. Polyaenus, *Strat*. III.9.62.
119. App., *BCiv*. II.8.49.
120. Hawkins 1847.
121. Pritchett, op. cit., 61–5.
122. Xen., *Hell*. II.4.12.
123. Hom., *Il*. IV.4. Peiros was the son of Imbrasus, from Ainos.
124. Pritchett, op. cit., 1–67.
125. Tac., *Ann*. IV.46.
126. Plut., *Aem*. XVIII.
127. e.g. Pl. 2 from Best 1969. See Plate 22.
128. Marazov 2005, 175, Pl. 105.
129. Archibald 1998, 203.
130. *AOTMAPW*, 124–7; Plut., *Aem*. XVIII; *TTT*, 17.
131. Dean 2008, 30.
132. Lendon 2005, 95.
133. Thuc. II.81.8; Sabin et al. 2007, 221.
134. Xen., *An*. VII.4.15.
135. Thuc. VII.27.
136. Peiros was the son of Imbrasus, from Ainos.
137. Best 1969, 9–11; *AOTMAPW*, loc. cit.
138. Best, op. cit., 3; *TP*; Archibald 1998, 203–4.
139. Warry 1980, 50–1, 61.
140. Archibald, op. cit., 203–4.
141. See Plate 27.
142. *TTT*, 15. See Plate 6.

143. Davis & Kraay 1973, Pls 186, 187, 190.
144. Venedikov 1977a, No 363 and Marazov 2005, Pl. 73. See Plate 23.
145. Dean 2008, 30.
146. Xen., *An*. I.10.7.
147. Thuc. II.79.
148. Gaebel 2002, 96.
149. Thuc. III.95–9.
150. ibid. IV.38.
151. ibid. VII.82.
152. *TTT*, loc. cit; Sekunda 2000, 13; Best 1969, 7. See Plate 24.
153. Eur., *Rhes*. 300.
154. Best, op. cit., 139–42.
155. Archibald 1998, 202.
156. *TTT*, loc. cit; Best, op. cit., 102–5, 139–42.
157. Xen., *An*. VII.3.48.
158. Sidnell 2006, 61.
159. Victor Davis Hanson from an email received 4 May 2001.
160. Xen., *An*. 6.3.

161. Giraldus Cambrensis, *The Description of Wales* II.3 (AD1194) Oxford, Mississippi, 1997 <http://www.visionofbritain.org.uk/text/contents_page.jsp?t_id=Cambrensis_Desc>.
162. Mersey 1997.
163. Didymus and Justin, quoted in Head 2001, 11.
164. Markle 1978, 490.
165. Lucian, *Nekrikoi Dialogoi* XXVII.3. J K Anderson (1970, 131) says at least one detail of this account – the cavalryman's twenty-cubit lance – must be exaggerated. Incidentally, this passage is indirect evidence for the presence of Thracians in Lysimachus' phalanx.
166. Minchev & Pletnyov 2006, 77.
167. Best 1969, 139–42; *TTT*, 10–13.
168. Ael., *Tact*. XII.
169. *TTT*, 329.
170. Markle 1978, 486; Hammond 1997, 355–72. Hammond is unequivocal about the timing of Philip's visit but other modern authors suggest stays of up to ten years starting when he was six or seven years old.
171. Plut., *Dem*. XXIX.
172. Xen., *Hell*. IV.6.5–12
173. *TAG*, 13

174. Xen., *Hell*. V.4.39.
175. ibid., V.3.5.
176. ibid., V.4.54.
177. ibid., IV.5.11–18.
178. *TP*, 16.
179. Griffith 1935, 239.
180. op. cit., 111.
181. Trundle 2005, 4–5.
182. *AOTMAPW*, 114.
183. Trundle, loc. cit.
184. Xen., *Hell*. VI.1.9.
185. Ueda-Sarson 2002a, 33.
186. ibid.
187. Trundle, loc. cit.
188. Griffith, op. cit., 17.
189. Trundle, loc. cit.
190. *AOMAPW*, 47.
191. Plut., *Aem*. XVIII.
192. Anderson 1970, 132.
193. Connolly 1981, 48, 80.
194. Warry 1980, 67, 73–4.
195. Diod. Sic. XV.44.4; Corn. Nep., *Iph*. II.1.
196. Corn. Nep., *Iph*. XI; Diod. Sic. XV.44; Warry op. cit., 67; Best 1969, 102–12, 117–19; *TP*, 14–16.
197. Xen., *Hell*. II.4.25; Aeneas Tacticus XXIX. 11–12.
198. Anderson, op. cit., 130.
199. Sabin et al. 2007, 327, Fig. 11.1.
200. ibid., 326–9.
201. The hoplite's shield was called an *aspis* or a *hoplon*, although the latter could also refer to his weapons or even his full armament.
202. Ueda-Sarson, op. cit., n. 17.
203. Polyb. IV.11.
204. Polyb. XVIII.24.8.
205. Cawkwell 1989, 382.
206. *AOTMAPW*, 47.
207. Diod. Sic. XIX.19.4.
208. Ueda-Sarson 2002b, 24.
209. ibid.; Polyb. X.31.11 & X.49.1. Ueda–Sarson says they were pikemen who were trained to use javelins when necessary.
210. Ueda-Sarson, op. cit., n. 14.

211. Ael. *Tact*. II.8.
212. *AOTMAPW*, 114.
213. Diod. Sic. XVI.24.2.
214. Ueda-Sarson, loc. cit.
215. Sabin et al. 2007, 326–9; 328, Fig. 11.2.
216. Xen., *Hell*. VI.2.14–37.
217. Parke 1933, 80–1.
218. Anderson 1970, 130–2.
219. Parke, op. cit., 80–1.
220. Xen., *Hell*. I.1.31; Corn. Nep., *Chab*. XII.2.3; Polyaenus, *Strat*. II.1.2; Diod. Sic. XV.32–6.
221. e.g. Arr., *Anab*. I.6.2.
222. The troops were in the second line because they weren't as good as the pikemen and because they were Greek and thereful less reliable but they still had to be good enough to fend off encircling cavalry.
223. Everson 2004, 173; Hanson 1989, 162; Anderson 1991, 20.
224. Anderson 1970, 130.
225. Ueda-Sarson 2002a, 31.
226. Xen., *An*. I.8.9; *Cyr*. VI.2.10; VII.1.33.
227. Hdt. VII.89.3.
228. Nelson 1973, 25; Morrison et al. 2000, 47.
229. Sekunda 1983 lists several instances of use at sea for the *dorudrepanon*.
230. Everson 2004, 172–4.
231. ibid., 173.
232. <http://www.britishmuseum.org/explore/highlights/highlight_objects/gr/t/the_ tomb_of_payava,_a_lykian_a.aspx>.
233. 'Hellas: Soldiers of Bronze – Hellenistic Arms and Armour' <http://wildfiregames.com/0ad/page.php?p=1568> (viewed on 20 February 2009). Modern re-enactors are still trying to find an efficient natural glue that would keep together this type of armour after more than thirty minutes of rain, but ancient armourers had hundreds of years of experiment to find it.
234. Sabin et al. 2007, 339.
235. Ueda-Sarson 2002a, 30.
236. Xen., *Hell*. VI.2.13–14.
237. Ueda-Sarson, op. cit., 30–1.
238. ibid., 32.
239. Everson 2004, 172–3.

240. Best 1969, 103.
241. *AOTMAPW*, 97.
242. Ueda-Sarson, op. cit., 30.
243. Anderson 1970, 130.
244. Ueda-Sarson, op. cit., 31.
245. Diod. Sic. XV.44.
246. Warry 1980, 67.
247. Dean 2008, 30.
248. Everson, op. cit., 173.
249. Parke 1933, 80.
250. Best 1969, Pls 3, 4.
251. Head 2001, 12.
252. Best, op. cit. 104.
253. ibid., 102–10.
254. *AOTMAPW*, 129 & 159.
255. ibid., 97.
256. Markle 1978, 487.
257. Diod. Sic. XX.52.1.
258. Plut., *Phil*. IX.1.
259. Parke, op. cit., 77–8.
260. Corn. Nep., Iph. XI; Isaios 2 *Concerning the Estate of Menekles* VI; Aeschines 2 *De Falsa Legatione* 149; Isaios, op. cit. XI.40.
261. Cawkwell 1989, 382.

262. Dean 2008, 31.
263. Sabin et al. 2007, 341.
264. *AOTMAPW*, 47.
265. ibid.
266. Polyb. V.53.8.
267. ibid, 114.
268. Ueda-Sarson 2002b, 25.
269. *AOTMAPW*, 115.
270. ibid.
271. ibid.; Ueda-Sarson, op. cit., n. 16; Sekunda 1995, 23–4 identifies the man on the stele as an imitation legionary but this is disputed.
272. Ueda-Sarson, op. cit., 25.
273. Everson 2004, 196; Connolly 1981, 132.
274. Ueda-Sarson, loc. cit.

275. Connolly, op. cit., 119.
276. *AOTMAPW*, 115; Ueda-Sarson, loc. cit.
277. ibid.
278. Sekunda, op. cit., 72.
279. Ueda-Sarson, op. cit., 28
280. <http://archiver.rootsweb.ancestry.com/th/read/WARWICK/2006-09/1157213019> Cruciani et al. 2004.
281. Webber 2001c, 47.
282. See Plate ???
283. <www.roman.britain.org/military/coh1thr.htm>.
284. The information on this and the other Thracian units was obtained from <http://pub45.ezboard.com/fromanarmytalkfrm1.showMessage?topicID=657.topic>.
285. <www.roman.britain.org/military/coh1thr.htm> – reproduced by permission of the author.
286. Cheshire 1987, 13 – he said 'recently' i.e. early 1987 or late 1986 but I have not yet found out anything more about this.
287. <http://www.camulos.com/virtual/guidee.htm#longinus> viewed on 27 November 2008.
288. Zahariade, Mihail, 2009, *The Thracians in the Roman Imperial Army from the First to the Third Centuries AD Volume I: Auxilia*.

Chapter 6. Military Organization (pp. 132–138)

1. Xen., *An*. VII.5.15.
2. ibid., VI.1.1–13.
3. Pl., *Leg*. 15a.
4. Cawkwell 1989, 385.
5. Athenaeus I.15e; Lawler & Kober 1945, 98.
6. Xen., *An*. VII.
7. ibid., VI.1.5–6.
8. Lawler & Kober, op. cit., 107; Hill 1943. I obtained a picture from the museum and verified that no Thracians were in the scene described.
9. Thuc. II.100. The annual income of the Athenian empire was around 1000 talents – see Meiggs 1973, 258.
10. Youroukova 1976, 12.
11. Xen., *An*. VII.3.10.
12. ibid., VII.3.19.
13. Marazov 2005, 146.
14. Krentz 1991, 117.
15. Xen., *An*. IV.4.22.

16. ibid., VI.5.
17. Arr., *Tact*. XVI; Asclepiodotus, *Tactics*, VII.3.
18. Arr., *Tact*. XVI, 6–9.
19. Sidnell 2006, 80.

20. This feature of the wedge has saved my simulated Thracian cavalry from disaster many times!
21. Nicolaus of Damascus in his *Collection of Strange Customs* (Nic. Damas. Mor. Mirab. frag. 116J).
22. Hind 1992–3, 84.
23. Hdt. VII.111.
24. Thuc. II.101.
25. Gaebel 2002, 97.
26. App., *BCiv*. IV. 13.102–6 (42BC).
27. Papazoglu 1978, 38.
28. Archibald 1998, 15.
29. Ar., *Arch*.
30. Hom., *Il*. XIV.
31. Eur., *Alc*.
32. Hor., *Carm*. III.26.10.
33. Verg., *Aen*. XII.132.
34. Xen., *An*. VII.4.
35. Polyaenus, *Strat* III.13.2.
36. Eur., *Andr*.
37. Livy XL.21–3.
38. Tac., *Ann*. IV.46–51.
39. Livy XL.58.
40. Arr., *Anab*. I.1.6.
41. Front., Str. II.12.
42. Polyaenus, *Strat*. XXXI.3.
43. ibid. IV.2.16.
44. Arr., *Anab*. I.1.6.
45. Livy XXXVII.40.
46. App., *BCiv* . IV.13.103; 42BC.
47. ibid., IV.11.87–8 (Loeb).
48. *Excerpts of Polyaenus* XXXI.3.
49. Polyaenus, *Strat*. III.9.50.
50. Paus. VIII.17.3.

Chapter 7. Fortifications (pp. 139–155)

1. Xen., *An*. VII.4.2.
2. Polyb. XXIII.8; there is a similar story in Tac., *Ann*. II.67.1–4; I visited Eumolpia during an excavation in 1986, and then again in 1999 and 2008.
3. Dio Cass. LI.22.7.
4. Marazov 2005, 152.
5. Dio Cass. LI.23.2–27.1 and
6. Theodossiev 2000, 15.
7. Front., *Str*. III.5.
8. Arr., *Anab*. I.3–4.
9. Archibald 1998, 40–1.
10. Dio Cass. LI.22.7; Marazov, op. cit., 151.
11. Hoddinott 1981, 56.
12. Bospatchieva & Kolarova 2005, 79, n. 2.
13. ibid., 69–83.
14. ibid., 74.
15. ibid., 81–2.
16. ibid., 79.
17. Tac., *Ann*. III.38–9.
18. Archibald, op. cit., 40.
19. Dem., *Or*. VIII.39–47.
20. Tac., *Ann*. IV.46–51.
21. Hoddinott 1981, 130.
22. Bouzek 2005, 6.
23. Theodossiev 2000, 14.
24. Hoddinott, op. cit., 105.
25. ibid, 14, 131, 120.
26. ibid., 133.
27. ibid., 113.
28. ibid., 111.
29. ibid., 16.
30. *The National Museum of History* CD-ROM, Technologica, Sofia, 1995.
31. Hoddinott, op. cit., 41–2.
32. Marazov 2005, 151.
33. Xen., An. VII.4.14.
34. MacKendrick 1975, 13–14.
35. Hoddinott, op. cit., 110–11.
36. MacKendrick, op. cit., 11.

37. ibid., 13.
38. ibid., 19.
39. ibid.
40. Hoddinott, op. cit., 62.
41. Chichikova et. al. 1992, 79.
42. Stoyanov et. al. 2006, 3–4.
43. ibid.
44. ibid., 11.
45. ibid., 44.
46. <http://www.perperikon.bg> Some of these interpretations are disputed.
47. Ovcharov & Kodzjamanova 2002, 16–19.
48. Also spelt *Tirisis* or *Tiristis*.
49. Kinov 2000; Hind 1992–3, 87.
50. Kinov, op. cit., 6.
51. Hind, op. cit., 87.
52. ibid., 86.
53. Venedikov 1977b, 75.
54. Dimitrov 1961.
55. Theopompus fr. 246; Strab. VII.320; Stephanus Byzantinus CCCXLVI.1. It is mentioned in an inscription at Seuthopolis.
56. Dem., *Or*. VIII.44; X.15.
57. Eutropius VI.10.
58. Millar 1981, 274.
59. Hoddinott 1981, 156–7.
60. ibid. 155.
61. Oppermann 1984, 181.
62. MacKendrick 1975, 61–6.
63. Hoddinott, op. cit., 151.
64. MacKendrick, op. cit., 55–8; Hoddinott, op. cit., 155–6.
65. <http://www.cimec.ro/Arheologie/sarmi/2eng.htm>>.
66. Dio Cass. LXVIII.9.
67. MacKendrick, op. cit., 58; Hoddinott, op. cit., 156; <http://www.cimec.ro/Arheologie/ sarmi/3eng.htm>.
68. Millar, op. cit., 271.
69. MacKendrick, op. cit., 67–8.
70. ibid., 80–90.
71. Xen., *Hell*. III.2.1–4.
72. Thuc. II.100; Diod. Sic. XII.49.50–1.
73. Polyaenus, *Strat*. II.27.

74. Livy XXXIII.40.
75. Front., *Str*. III.15.
76. Tac., *Ann*. II.67.1–4
77. ibid., IV.46–51.

Chapter 8. Battles and Tactics (pp. 156–174)

1. Thuc. II.100.
2. Diod. Sic. XII.49.50–1.
3. Strab. VII.f47.
4. Diod. Sic. XII.49.50–1.
5. ibid., XX.22–3.3 – a total of about 30,000 cavalry. This figure is significant as it shows what a tribal nation of horsemen could bring to a battle.
6. ibid., XV.36. 1–5.
7. App., *Mac*. IX.18.
8. Diod. Sic. XVIII.14.2.
9. Livy XXXVIII.40.
10. Xen., *An*. VII.3.4–7.57.
11. These are probably not a mountain range, as Xenophon seems to have never moved far from Perinthus (where their booty was sold), and Seuthes promised they would never be more than a week's march from the sea. Some mountains in the Thracian Chersonese are a possibility, as are the more extensive mountains near Edirne.
12. ibid., VII.4.14–41.
13. ibid., VII.4.20.
14. ibid., VII.3.10.
15. ibid., VII.5.1; VII.7.53.
16. Youroukova 1976, 12.
17. Xen., *An*. VII.5.16.
18. ibid., VII.7.23; I,7; *TTT*, 21; Best 1969, 76.
19. Xen., *An*. III.3.16.
20. Diod. Sic. XIV.31.5.
21. Xen., An. VII.7.23; *TTT*, 21; Best, op. cit., 76.
22. Xen., *An*. VII.2.
23. ibid., III.3.16.
24. ibid., VII.3.
25. ibid., VII.7.2.
26. ibid., VII.5.15.
27. ibid., VII.5.15; VII.4.20.

28. ibid., VII.6.26.
29. Diod. Sic. XV.36.1–5.
30. Florov & Florov 2001, 114.
31. Warry 1980, 93; Carey 2007, 86–8.
32. Livy XXXIII.4–10.
33. App., *Mac* . from 'The Embassies' 5.
34. Livy XXXVII.33.
35. ibid., XXXVII.40–3.
36. Gell., *NA*. X.25.
37. ibid.
38. Livy XXXVIII.49.
39. ibid., XXXVIII.40–1.
40. ibid., XXXVIII.41.
41. ibid., XXXVIII.49.
42. ibid., XXXVIII.41.
43. ibid., XXXVII.21–3.
44. *AAEMAPW*, 82.
45. Livy XXXVIII.21–2.
46. ibid., XLII.52.
47. ibid.
48. ibid., XLII.57–60.1.
49. ibid., XLII.52.
50. Sekunda 1983, 280.
51. Montagu 2006, 81; Hammond & Walbank 1988, 517–19.
52. Plut., *Aem*. XVIII; Livy XLIV.40.

53. Plut., *Aem*. XVIII.
54. ibid.; Sabin 2007, 202.
55. Livy XLIV.40.
56. ibid., XLIV.42 .
57. Sabin, op. cit., 200.
58. Livy XLV.19.
59. e.g. ibid., XLV.14.
60. Hammond & Walbank 1988, Fig. 5.
61. ibid., Appendix 7 and Fig. 20.
62. ibid., Fig. 8.
63. ibid., Figs 9 & 10.
64. ibid., Fig. 26.
65. ibid.
66. ibid., Fig. 24.

67. Cheshire 1987, 15.
68. Curt. Ruf. VIII.14.24–30.
69. Cheshire, loc. cit; *AOTMAPW*, 51; regarding the terrain, Livy XL.22 (181BC) says that Philip V tried to climb Mount Heamus but 'as they reached the high levels they were increasingly faced with wooded and often impassable ground. Eventually they came upon a track so shaded that it was scarcely possible to see the sky for the density of the trees and the interlacing branches.'
70. Warry 1980, 50.
71. Xen., An. III.3.
72. *TT;* Best 1969, 13, 87–8 says that the peltasts at Lechaeum were Thracian, but other scholars deny this.
73. *TAG*, 13.
74. *TP*, 16.
75. Thuc. II.100.
76. Arr., *Anab*. I.2–4.
77. Thuc. VII.27.
78. Xen., *An*. I.10.
79. ibid., VI.5.
80. Livy XXXI.35.
81. Paus. IX.30.5.
82. Polyaenus, *Strat*. II.2.6.
83. Hdt. VI.46.
84. e.g. Polyaenus, *Strat*. II.2.6, XVI.2, II.2.10, III.9.50, XXXI.3.
85. ibid., II.2.6.
86. Xen., *An*. VII.3.
87. Best 1969, 17–29.
88. Arr., *Anab*. I.1.
89. Polyaenus; Bloedow (1996) argues that this device could not have been used, or that the explanation of its ineffectiveness was insufficient. Certainly the events described seem rather impossible, especially in the area of the Shipka Pass. However, as there is some evidence of other similar devices being used, I prefer to give Arrian (a usually reliable source) the benefit of the doubt.
90. Sall., *H*. III.36M.
91. CAH.
92. Florus II.27.
93. Tac., *Hist*.

Chapter 9. Thracian Tribes (pp. 175–201)

1. The Dentheletai and Scordisci were Illyrian tribes that were at least partly Thracian. The Dacians deserve a whole book of their own.
2. Or so Evgeni Paunov told me. He may have changed his mind, though, see Paunov & Roxan 1997, 274–9.
3. Val. Flacc. II.229–32.
4. Hdt. VII.111.1.

5. Strab. VII.5.12.
6. *AT*, 126; Hoddinott 1981, 130.
7. Dio Cass. LIV.34.1–7.
8. Florus II.27.
9. Tac., *Ann*. IV.46.
10. ibid., IV.46–51.
11. Strab. VII.f36.
12. Hdt. VII.115.
13. ibid., VII.115–16.
14. Livy XLV.30; XLIV.46; Plut., *Per*. XI.5; Strab. VII.f36; Diod. Sic. XII.68.5.
15. loc. cit.
16. Livy XLV.30.
17. ibid., XLIV.46.
18. Davis & Kraay 1973, 259.
19. Hom., *Il*. X,482–97.
20. App., *Mith*. I (Loeb Trans.).
21. Strab. XII.3.3.
22. Hdt. VII.78.
23. loc. cit.
24. Bevan 1966, Vol. 1, 81.
25. Xen., *An*. VI.4.1–2.
26. Balcer 1988, 8.
27. Hdt. VII.78; Cheshire 1987, 13.
28. Bevan, op. cit., 78.
29. *AOTMAPW*, 29.
30. Xen., An. VI.4.1; *Hell*. XI.2; An. (Penguin p. 283).
31. Plut., *Alc*. XXXVII.4.
32. Davis & Kraay, op. cit., 258.
33. Mem., *Heracl*, XII.4.
34. Bevan, op. cit., 96.
35. Mem., *Heracl*. XII.4.
36. ibid., VI.3.

37. Bevan, loc. cit.
38. Mem., *Heracl*. IX.2.
39. ibid., XII.6.
40. ibid., X.2.
41. ibid., XI.5.
42. Griffith 1935, 184.
43. Arrian's *Bithynica*: Jacoby, *FrGrH*, Nr.156.29.
44. Davis & Kraay 1973, 258 say 228BC; Bevan says 235BC.
45. Davis & Kraay, op. cit., 258.
46. Polyb. V.111.
47. ibid., IV.51–2.
48. Livy XXXII.3.
49. ibid., XXXVI.56.
50. Davis & Kraay, op. cit., 260. Prusias is sometimes said to have ascended the throne in 185BC, two years before.
51. App., *Mith*. I.
52. Livy XLIV.15; XLV.44.
53. Koychev & Mutafov 2002, 156–7.
54. App., *Mith*. I.4.
55. Davis & Kraay, op. cit., 262.
56. ibid., 263.
57. Matyszak 2008, 21.
58. Matysyk, op. cit., 20–1.
59. ibid., 27.
60. ibid., 33.
61. App., *Mith*. III.17.

62. Griffith, op. cit., 185.
63. Xen., *An*. VI.3.
64. ibid., VI.3.8.
65. ibid., VI.4.
66. ibid., VI.4.26.
67. ibid., VI.5.
68. ibid., VI.5.
69. Diod. Sic. XIV.38.2.
70. Xen., *Hell*. III.2.3.
71. *AOTMAPW*, loc. cit.
72. Griffith 1935, 183.
73. Rostovtzeff 1941, 570–1.
74. Bevan 1966, Appendix G.

75. App., loc. cit.
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77. App., *Mith*. III.18.
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79. Sekunda 1995, Fig. 77.
80. Thuc. VII.27.
81. Paus. I.23.3.
82. Thuc. II.98.
83. ibid., II.100.
84. ibid., VII.27.
85. Tac., *Ann*. II.67.1–4.
86. Strab. 7.3.13.
87. Hdt. IV.80.
88. Arr., *Tact*. XVI.6.
89. Ov., *Tr*. IV.6.45–8.
90. Thuc. II.96 and 98.
91. Batty 1994, 92.
92. Hdt. IV.93.1.
93. ibid., IV.98.
94. ibid., IV.95.2.
95. ibid., IV.94.
96. Pl., *Chrm*. 156d.
97. Diod. Sic. XXI.11–12.
98. Val. Flacc. V.95–100.
99. Richmond 1995.
100. Ov., *Tr*. V.7.9–20.
101 Polyaenus, *Strat*. VII.38.
102. loc. cit.
103. Arr., *Anab*, I.4–5.
104. App., *Mac*. IX.18.
105. loc. cit.
106. *AT*, 228.
107. ibid.
108. Venedikov 1977b, 79.
109. App., *BCiv*. III.3.24–5.
110. Giurescu 1972, 24 (AD12/13); *AT*, 230 says 100,000 people were moved.
111. Strab. VII.3.13 says it was the same as the language of the Getai.
112. *AT*, 127–9; Wilcox & Embleton 1987, 24–6.
113. Hom., *Il*. Papazoglu (1978, 392–5) agrees.

114. Strab. VII.3.2.
115. Plut., *Thes*. V.
116. Florus II.26.
117. Ar., *Ach*. 130–70.
118. Thuc. V.6.2.
119. Hdt. VII.111.

120. Xen., *An*. VII.3.16.
121. e.g. Xen., *Hell*. IV.8.26.
122. Thuc. II.100.
123. Xen., *Hell*. III.2.2.
124. Livy XLII.52.
125. Hammond 1989, 40.
126. Merker 1965, 36.
127. Hdt. VII.115.
128. Merker 1965, 40.
129. Strab. VII.f4.
130. Hdt. V.17.
131. ibid.,VII.111.
132. ibid., V.1–3.
133. David Karunanithy, from some notes he sent me from his book about war dogs.
134. Thuc. II.100.
135. Diod. Sic. XVI.22.3.
136. ibid., XVI.2.5.
137. ibid., XVI.3.4.
138. e.g. Polyaenus, *Strat* . IV.12.3; Merker 1965, 53.
139. Plut., Aem. XVIII.6; *AOTMAPW*, 124.
140. Curt. Ruf. IV.9.24.
141. Diod. Sic. XVII.17.4.
142. Arr., *Anab*. I.14.1, 6; II.7.5; II.9.2; III.13.3–4; Merker, op. cit., 46.
143. Hdt. VII.115
144. Thuc. II.100.
145. Arr., *Anab*. VII.
146. Curt. Ruf. IV.15.21.
147. Arr., *Anab*. I.5.
148. Curt. Ruf. III.9.10, and V.3.6; Sekunda 1987, 36.
149. Arr., *Anab*. IV.24.
150. Curt. Ruf. VIII.14.24.
151. loc. cit.

152. Arr., *Anab*. III.23.
153. ibid., III.25.
154. ibid., II.10.
155. ibid., II.19.
156. ibid., III.18.
157. ibid., IV.19.
158. ibid., IV.29.
159. Curt. Ruf. VIII.11.9.
160. Arr., *Anab*. IV.3.
161. Curt. Ruf. V.3.6.
162. Arr., *Anab*. I.14.
163. ibid., I.2.
164. ibid., III.9.
165. ibid., III.12–13.
166. Curt. Ruf. IV.15.21.
167. Arr., *Anab*. IV.4.
168. ibid., IV.23.
169. ibid., IV.26.
170. Curt. Ruf. IX.8.18.
171. Arr., *Anab*. V.13–14.
172. ibid., V.23–4.
173. ibid., VI.2.
174. ibid., VI.8.
175. Xen., *An*. VII.2.
176. ibid., VII.5.
177. Hdt I.28.1.

178. Xen., *An*. VII.4.2.
179. Mem., *Heracl* IX.5.
180. In Albanian, Triballi means 'three fronts' but there are many alternative etymologies, such as 'with three peaks' or 'very powerful' or 'villagers' – Papazoglu 1978, 71–2.
181. Thuc. II.100.
182. Dem., *Con*. XXXIX.
183. Arist., *Top*.
184. *AT*, p. 25.
185. Ar., *Av*. 1567–71 (see the chapter on costume for the full text).
186. ibid., 1520–2; Papazoglu, op. cit., 68–9.
187. Pliny, *HN*. II.7.
188. Ant. Lib., *Met*. XXI.

189. Hdt. IV.49; Thuc. II.96; Papazoglu, op. cit., 58–67; Vasic 2005, 17.
190. Polyaenus, *Strat*. XV.8.
191. Papazoglu, op. cit., 22.
192. ibid., 36.
193. Nicolaus of Damascus, *Collection of Strange Customs* [Nic. Damas. Mor. Mirab. frag. 116J].
194. Lucian, *Eulogy of Demosthenes*, XXXIV (T32); Papazoglu, op. cit., 24.
195. Thuc. IV.101.
196. Diod. Sic. XV.36.1–5.
197. Hind 1992–3, 84.
198. Just., *Epit*. IX.3.
199. Riginos 1994, 116–17.
200. Polyaenus, *Strat*. XLVI.8.
201. Papazoglu 1978, 24.
202. Venedikov 1977b, 79.
203. Papazoglu, op. cit., 46–8.
204. I have seen them while flying over the river on a flight from Sofia. Although such islands could have been in different locations 2,000 years ago, their existence lends credulity to the concept.
205. Strab. VII.3.13; Papazoglu, op. cit., 52.
206. Paus. X.19.7.
207. Just., *Epit*. XXV.1.2–3.
208. Eutropius IV.27; Dio Cass. LI.23.3–4; Papazoglu, op. cit., 56; Vasic 2005, 17.
209. Mócsy & Frere 1974, 25.
210. Papazoglu, op. cit., 9.
211. Arr., *Anab*. V.26.
212. ibid., VII.9.
213. Vasic, loc. cit.
214. See Megaw et al. 2000, 23–41.

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